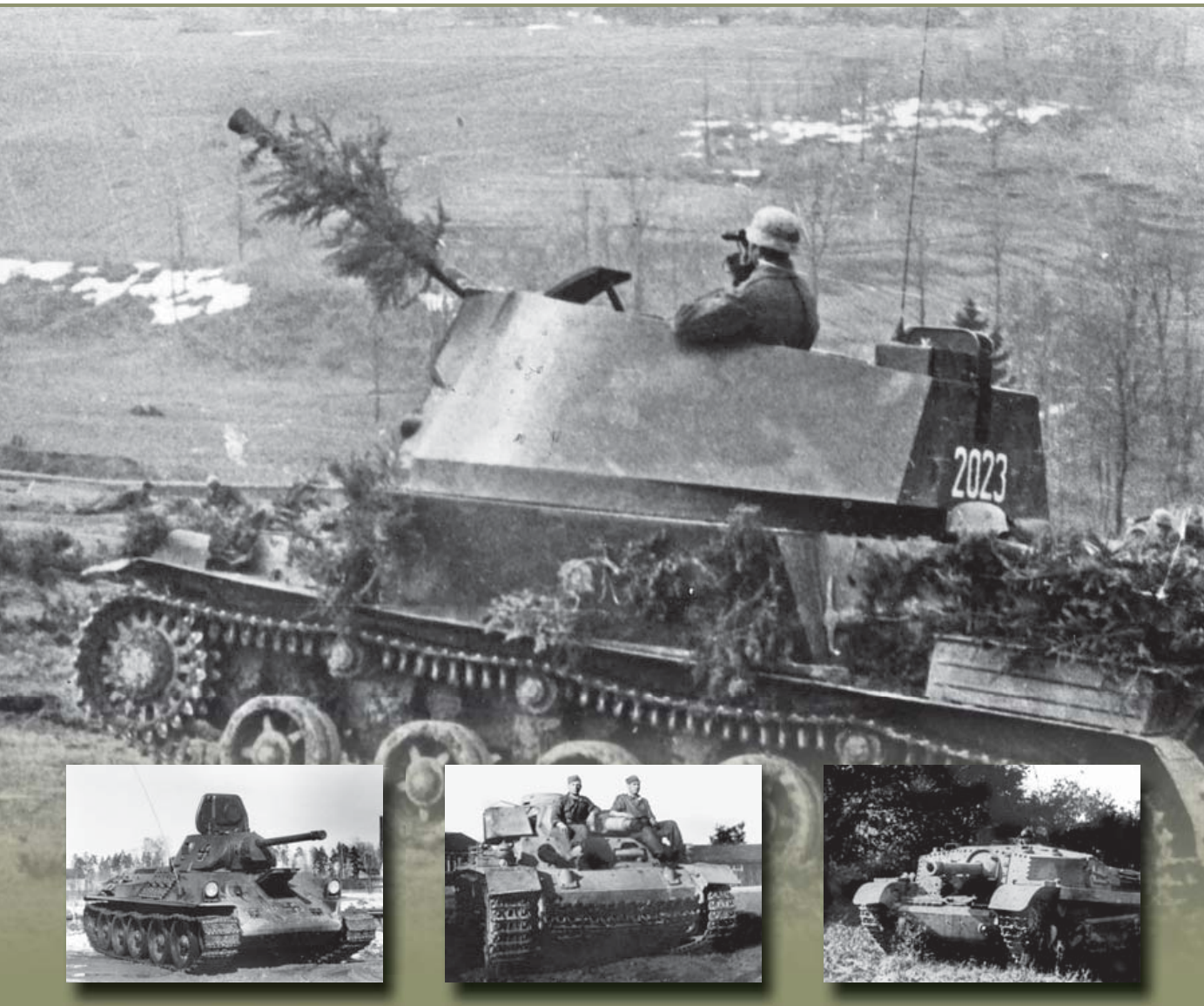
TANKS OF HITLER'S EASTERN ALLIES 1941–45



STEVEN J. ZALOGA

ILLUSTRATED BY HENRY MORSHEAD

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NEW VANGUARD 199

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TANKS OF HITLER'S EASTERN ALLIES 1941–45

INTRODUCTION

During World War II, the Wehrmacht's eastern allies fielded the equivalent of several armored divisions. These tank formations are little known in the English-speaking world since they fought exclusively on the Russian Front. Although largely forgotten, they are a fascinating subject not only on account of the extremely eclectic collection of tanks used by these armies, but also because of the insight they provide into the troubled relations between Germany and its allies.

During the war against the Soviet Union between 1941 and 1945, Germany attempted to recreate an anti-Russian alliance to replace the Kaiser's Central Powers of the Great War. With the demise of the Austro–Hungarian Empire after World War I, this meant a far more complex set of alliances with the smaller states that had emerged in east-central Europe. Austria and the Czech lands had already been annexed by Germany prior to the start of World War II. So treaties were signed with the states that were reborn from the old Habsburg Empire, including Hungary, Slovakia, Croatia, and Slovenia. Countries that had been in the Russian orbit during the Great War such as Romania, Finland, and Bulgaria were also welcomed into the anti-Soviet ranks. The multitude of states drawn into Germany's new network was not part of a cooperative coalition, but rather were co-belligerents tied to Germany by simple bilateral ties. Indeed some of the countries were still extremely antagonistic because of festering border disputes, most notably Romania and Slovakia versus Hungary.

The participation of these armies in the summer 1941 campaign against the Soviet Union revealed the profound shortcomings of these impoverished armies on the contemporary battlefield. Their armored forces relied on tank types that did not have the durability to withstand long road marches, and far more tanks were lost to mechanical exhaustion than to direct combat. Their tanks had armored protection and firepower typical of European designs of the late 1930s, but they were suddenly confronted by a new generation of Soviet tanks, most notably the T-34 tank, that were impervious to their guns and far better armed. None of these states had the industrial capacity to design and manufacture a new generation of tanks and so their armies were trapped into the continued use of increasingly obsolescent models through 1943.

Germany had a notoriously troubled relationship with its allies during World War II, preferring subservient vassal states to genuine partners. While the diplomatic complexities of these relationships are outside the scope of

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A view of a platoon of the Slovak Fast Corps in Ukraine in 1941. The vehicle in the foreground is an LT vz 40 light tank, while those in the background are Skoda LT vz 35s.

this book, the alliances shared the common thread of German indifference to the modernization of its allied armies. In contrast to the United States and Soviet Union, which provided a generous supply of weapons to their allies, Germany was reluctant to transfer any tanks to its eastern allies. Even if Germany faced its own shortages of tanks, Finland provided a model of what might have been done. Finland managed to create an armored division almost entirely on the basis of captured Soviet tanks and equipment. Yet the Wehrmacht made no effort to refurbish the thousands of Soviet tanks captured in 1941–42 as a possible armored reserve for its allies, but instead shipped them back to smelters in Germany. This even included modern types such as the T-34 that might have been used to modernize the weakly equipped eastern Axis armies. Berlin also limited the sales of tanks from the Czech plants to Hungary and Romania. German tanks were developed and manufactured by private firms rather than state factories, and Berlin did little to overrule their commercial interests, selling tanks to the allies for hard cash. As a result, Germany's impoverished eastern allies were equipped with a diverse collection of obsolete tanks acquired in the prewar years from all over Europe, without any benefit of standardization with the Wehrmacht.

The weakness of the Romanian, Hungarian, and Italian armies on the Don Front had not gone unnoticed by the Red Army. During the cataclysmic battles around Stalingrad in November 1942–January 1943, the Soviets targeted their poorly-equipped units with massive tank attacks that crippled their armies and enveloped the German 6.Armee in Stalingrad. It was only after Stalingrad that Berlin consented to significant tank sales to its eastern Axis partners, but by then their armies had been so badly crippled that they offered dwindling defensive value. By 1944, the eastern alliances were

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crumbling, and one by one the partners began switching sides. Helsinki renounced its alliance in August 1944 and forced the Wehrmacht in Finland to flee north into Norway. Romania switched sides in August 1944 and joined in a military alliance with the Soviet Union, attacking neighboring Hungary. Slovakia broke out in armed insurrection against the Germans in August 1944. Bulgaria, which had never participated in war against the Soviets, suddenly allied itself with the Red Army and joined in the Red Army's Balkan offensive in the autumn of 1944. Of the major eastern Axis armies, only Hungary remained allied to Germany, and only then after a pair of coups in Budapest ordered by Berlin. The Hungarian army fought alongside the Wehrmacht in the bitter campaigns around Budapest and Lake Balaton in January and February 1945 before succumbing to the Soviet onslaught.

SLOVAKIA

Slovakia was the first of Germany's eastern allies, and the only one to participate in the 1939 campaign against Poland. After German absorption of the Sudetenland in 1938, and the remainder of the Czech lands in 1939, Berlin permitted the formation of a Fascist state in the eastern Slovak provinces in March 1939. Slovakia was allowed to create an army from the materiel of the former Czechoslovak Army remaining on Slovak soil. The former Czechoslovak 3rd Fast Division had left 79 Skoda LT vz 35 tanks in the Levice area and this formed the basis of the new Slovak Fast Division. The border dispute between Slovakia and Hungary erupted into a short war in March 1939 during the course of which the Slovaks lost at least one LT vz 35 during the fighting.

The LT vz 38 light tank was on the verge of entering service at the time of the dismemberment of Czechoslovakia, and the Slovak Fast Corps received 32 PzKpfw 38(t) Ausf. S from Czech factories via German channels after the outbreak of the war.

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Some of the LT vz 40 light tanks were employed without their main gun as command tanks, and this is the vehicle used by Lt Vanco, commander of the 2nd Tank Company. The Nazi flag is an air identification symbol to prevent attacks by Luftwaffe aircraft.

After the Slovak participation in the 1939 invasion of Poland, the Slovak army planned to build up its armored force along the lines of the original Czechoslovak fast divisions, but the Germans initially were reluctant to supply enough vehicles. Finally, a further 32 PzKpfw 38(t) Ausf. S and 21 LT vz 40 light tanks were supplied from the factories in the former Czech lands. These were used to form a tank battalion (Kobornia) under the Slovak Mobile Group organized for participation in the Russian campaign. The Slovak Mobile Group took part in the 1941 invasion of the Soviet Union, fighting along the southern route from Lvov to Kiev. In July, it was expanded into a mobile brigade and the tank element turned into a tank regiment, though with little increase in the number of tanks. In late August, it was elevated to a mobile division, but by this time its tanks were worn out and had been returned to Slovakia for repairs. Two platoons of tanks returned to the Russian front in late October, serving in the campaign in southern Russia and the Crimea, but losing most of the tanks in the January and February 1942 fighting. The Mobile Division was formally redesignated as an infantry division in August 1943 after its heavy losses in the Crimea.

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This is one of the first seven PzKpfw III Ausf. N obtained by Slovakia in 1943.

The Germans began efforts to rebuild the Slovak Army in 1944 with the supply of 37 PzKpfw 38(t), 7 PzKpfw III Ausf. N, 16 PzKpfw II Ausf. F and 18 SdKfz 138 Marder tank destroyers. However, in late August 1944, a military coup initiated the Slovak uprising against the Germans. The insurgents had a significant portion of remaining Slovak armor, including about 30 light tanks, 12 Marders and at least one PzKpfw III. This was all lost when the Wehrmacht crushed the insurgents.

HUNGARY

Of all Germany's allies on the Eastern Front, the Hungarian Army deployed the largest armored force and, apart from Italy, was the only ally with significant indigenous tank production. Even after the dissolution of the Austro–Hungarian Empire in the wake of the Great War, the Hungarian

A

1. SLOVAK LT VZ 35, TANK BATTALION, SLOVAK RAPID GROUP, RUSSIA, 1941

Slovak LT vz 35 tanks appeared in the original Czechoslovak army colors of *tmave zelene* (dark green), *okrove zlute* (ochre yellow) and *zemite hnede* (earth brown); the later LT vz 40 tanks appeared in a single color of Czech olive drab. During the course of the Russia campaign, the tanks had tactical numbers added on the turret rear in the German pattern in either red or black with a white outline, with the middle digit indicating the 2nd and 3rd tank companies.

2. HUNGARIAN PZKPFW IV AUSF. F1, 6TH TANK COMPANY,2./30TH TANK REGIMENT, RUSSIA, 1942

The vehicles purchased from Germany were left in their original colors, in this case RAL 7021 *dunkelgrau* (dark grey). The tactical marking indicated the tank company/platoon/vehicle and was a simple white stencil. It was usually carried on either side of the turret bustle box and on the rear, as shown in the inset. The national insignia was the usual Hungarian Balkan cross, carried on either side, the rear right corner, and sometimes the front. The inset drawings show the front and rear license plate. The inset of the rear hull corner also shows the tactical insignia for the 6th Heavy Tank Company.

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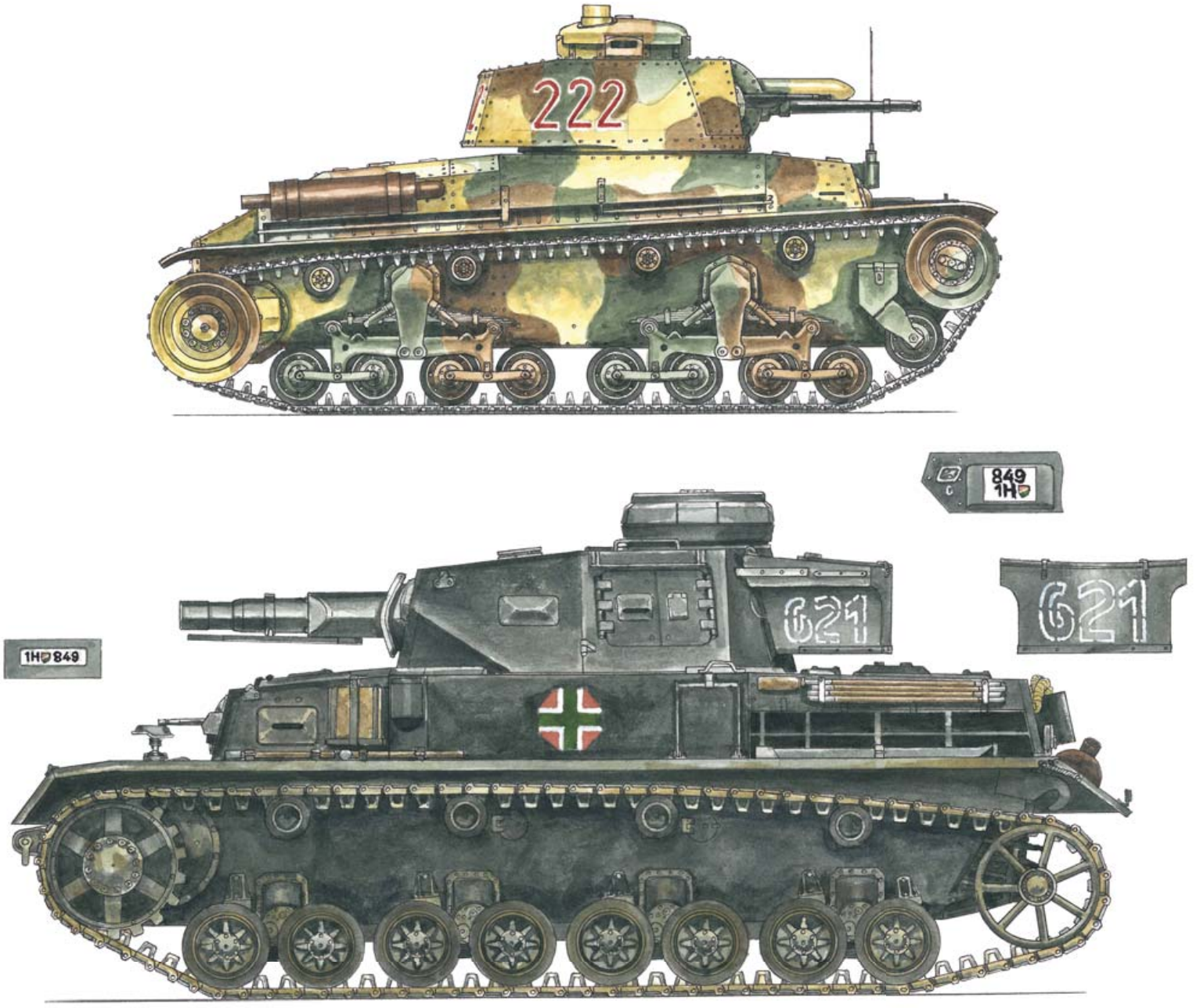

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The predominant tank in Hungarian service at the start of the war was the Toldi, a version of the Swedish Landsverk L-60 manufactured in Hungary. This particular example is fitted with an oval radio antenna for its R-5 radio, patterned after the Italian style.

Army was constrained by the disarmament clauses of the Trianon peace treaty. The treaty did allow Hungary to obtain armored cars for the police. The Honved (Hungarian Army) managed to skirt around the treaty by disguising armored vehicle purchases as police equipment. Starting in 1928, the army began a modest program to build up an armored force, including three Carden-Lloyd Mk IV tankettes, five Fiat 3000B light tanks, six Swedish m/21-29 light tanks and several armored cars. By the early 1930s, the treaty was being ignored and in 1934, the Honved purchased 30 Ansaldo CV33 tankettes from Italy, followed in 1936 with another order for 110 of the improved CV35 tankettes. Later purchases brought the final total to 151 and they were organized into seven tankette companies attached to the cavalry and motorized brigades. In 1937, the Hungarian government decided to ignore the Trianon treaty completely and rebuild the army under the "Huba 1" program. This included a more substantial armored force, so a more modern tank was desired. The first military use of Hungarian tanks took place in 1939 in the wake of the Munich agreement when Hungary seized the eastern part of Slovakia in concert with Germany's takeover of the remainder of the Czech provinces. This involved the 2nd Motorized Brigade with a Fiat 3000B light tank platoon and three Ansaldo tankette companies and the 1st and 2nd cavalry brigades, each with two tankette companies.

Hungary obtained a single Landsverk L-60 light tank from Sweden in 1936 for trials, and reached an agreement for license production in 1937. The amphibious V-4 tank was developed by the Hungarian engineer Nicholas Straussler, but it lost in a competition with the L-60 for the army contract. In 1938, the Honved selected the MAVAG plant for production, later extended to the Ganz factory as well. It was also decided to arm the Hungarian version,

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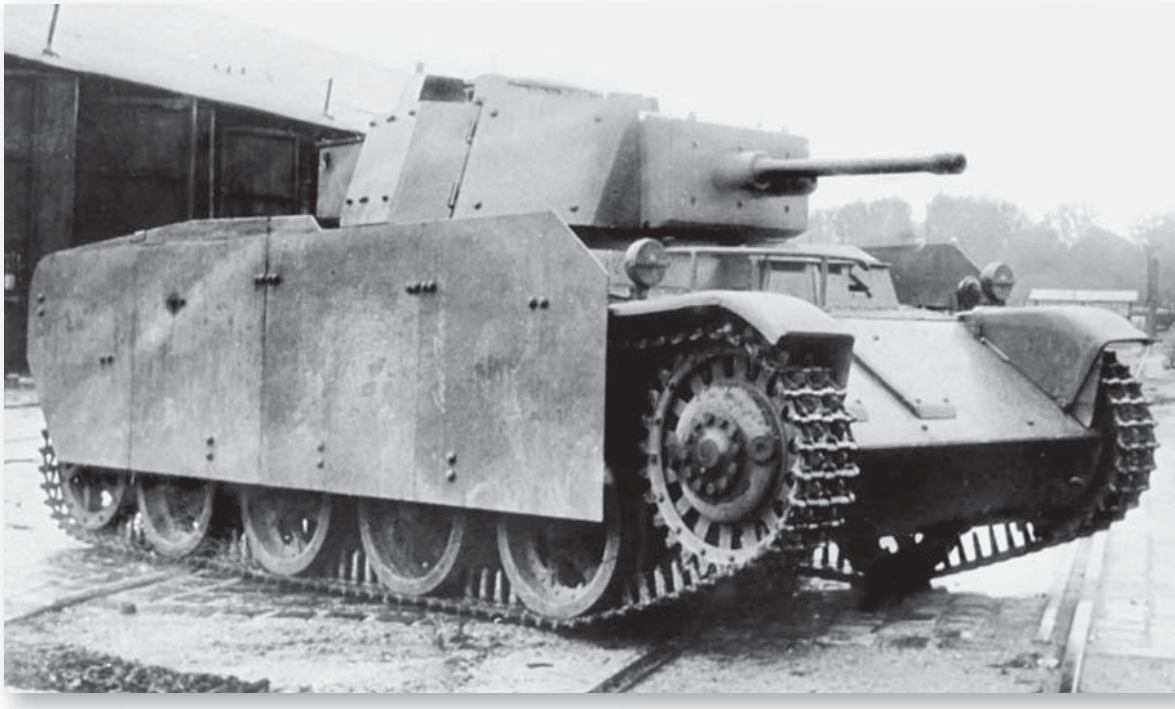
named the Toldi, with the locally produced version of the Solothurn 20mm antitank rifle along with a co-axial Gebauer 34/37.M machine gun. In view of Hungary's lack of experience in tank manufacture, the production process was delayed and the original contract batch of 80 Toldi tanks required the importation of some components from Sweden and Germany, including its Bussing-Nag engine. In the event, the first Toldi tanks were completed in March 1940.

The Toldi tanks were used to equip tank companies in the 1st and 2nd Cavalry Brigades. When Hungary seized portions of Transylvania from Romania as part of the Second Vienna Award in September 1940, there were 45 Toldi tanks in service, and some saw service in this short military action. The startling German Blitzkrieg victories of 1939–40 convinced the Honved that tanks were essential to a modern army. As a result, the original plans to deploy Toldi tank companies in the four cavalry brigades were expanded to the conversion of the 9th and 11th bicycle battalions into tank battalions for the new motorized brigades. This led to a second production series of Toldi tanks from May 1941 to December 1942, totaling a further 110 tanks. The second production batch was called the Toldi II and differed from the initial production series primarily in the greater use of locally manufactured components.

Hungary signed a tripartite pact with Germany on September 27, 1940 and later agreed to participate in the German invasion of Yugoslavia. During the short campaign in April 1941, the Honved deployed its new Fast Corps (Gyorshadtest) for the first time, which consolidated the two motorized brigades and two cavalry brigades under a single command. Three of the brigades were committed to the Yugoslav campaign, the 1st and 2nd Motorized Brigades and the 2nd Cavalry Brigade, each of which had an armored reconnaissance battalion with a Ansaldo company (18 tankettes),

The Toldi IIa improved the tank's firepower by substituting the 40mm tank gun. This necessitated the addition of a bustle extension at the rear of the turret to provide more internal space. At least one of the Toldi IIa was also fitted with additional side armor, as seen here, to improve protection against Soviet antitank rifles.



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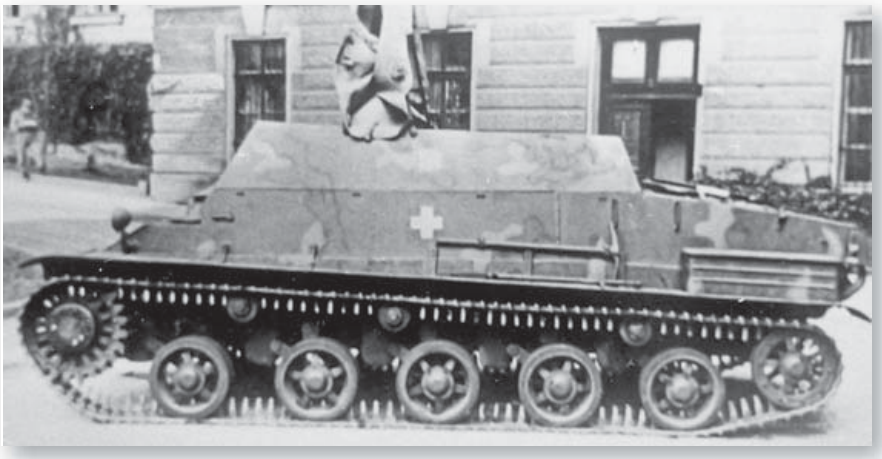

The Lehel was an effort to develop an armored ambulance or armored personnel carrier on the basis of the Nimrod chassis. It did not proceed beyond the prototype stage.

a light tank company (18 Toldis) and a Csaba armored car company. Although the tanks saw few serious battles with the Yugoslav army, the campaign was the first real trial of the tanks in Hungarian service and they required extensive repair work afterwards.

Hungary reluctantly entered the war with the Soviet Union, but did not take part in the initial invasion on June 22, 1941. A Soviet air attack on Hungarian border towns on June 26 served as the pretext for the declaration of war on June 27. This operation initially involved the same three brigades of the Fast Corps as used in Yugoslavia, and at the time included 60 Ansaldo tankettes and 81 Toldi light tanks. The Fast Corps fought on the southern front from Nikolayev to Isium on the Donets River, a distance of some 1,000km. The corps was withdrawn back to Hungary on November 15, 1941 after suffering 4,400 casualties, as well as losing all of its Ansaldo tankettes and 80 percent of its Toldi light tanks. Of the Toldis, about 25 had

The principal version of the Toldi to see production was the Nimrod. Although based on a Swedish 40mm antiaircraft vehicle, the Honved regarded the Nimrod as a dual-role weapon with excellent antitank potential. By the time it saw widespread service, as in this view of a battery in Galicia in April 1944, it was hopelessly obsolete in the antitank role.

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The initial Turan I tank was armed with a 40mm gun, and this example is seen in action with the 2nd Armored Division during its combat debut in Galicia on the Polish/Ukrainian frontier in the spring of 1944.

suffered combat damage and 62 had been worn out with mechanical problems; nearly all had been recovered. By the end of 1941, it was obvious that the Toldi was inadequate on the modern battlefield except as a scout tank. Its armor was vulnerable to any Soviet antitank weapon, including the ubiquitous 14.5mm antitank rifles, and its armament was inadequate against most Soviet armored vehicles.

The Honved wanted a modern medium tank, but in the short term was forced to settle for expedients. One of these was the proposed Toldi III, which thickened the armor and substituted a 40mm gun derived from the 40mm Bofors antitank gun. In the event, development was completed so late that only about a dozen new production tanks were manufactured in 1943. As a result, some of the Toldi II tanks were rebuilt as the Toldi IIa, which substituted the 40mm gun and incorporated a rear turret bustle to provide more internal volume in the turret for the new gun.

Another way of improving Hungarian firepower was the new 40M Nimrod armored autocannon. This was developed from the Landsverk L-62, which was a lengthened derivative of the L-60 tank but fitted with an open turret and a 40mm Bofors antiaircraft gun. The Honved had purchased a single example in 1938 and, after field trials, modified the design with an enlarged turret to accommodate more ammunition. This was viewed as an attractive option since it was based on components of the existing Toldi light tank. An initial production order for 26 Nimrods was placed in October 1941 and it was planned to use the Nimrod primarily as a tank destroyer with only a secondary antiaircraft role. Production contracts were later increased so that in the end some 135 Nimrods were built through 1944. Although it might have been a viable tank destroyer against tanks of the 1930s, by the time it entered service on the Russian Front it was hopelessly outdated.

Plans for a medium tank had been under way since 1939 when the Czech firms of CKD (Ceskomoravska Kolben Danek, Prague) and Skoda had been approached about suitable designs. The Czechoslovak Army had selected the CKD V-8-H design for its own use as the ST-39, but the German occupation had put an end to this program. Skoda had enlarged their S-IIa design as the

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The Turan II introduced a short 75mm gun to the design. It was originally intended to provide fire support to the basic Turan I, much like the German PzKpfw III/PzKpfw IV mix.

S-IIc, later designated as the T-21, and finally as the T-22 in its mature form. In August 1940, the Honved selected a modified version of the T-22 design with an enlarged three-man turret and a new 260hp engine from the Manfred Weisz firm. The new tank was designated the Turan, named after the legendary tribes of prehistoric Hungary. Although Hungary had obtained a license for the Czech A17 40mm tank gun, the 40M gun finally selected was adapted to fire the same 40mm ammunition used in the 40mm Bofors, since this ammunition was already in production in Hungary. The Turan prototype was completed in August 1941 and serial production began in August 1941, split between Manfred Weisz, Ganz, MVG (Gyor) and MAVAG. The first August production order was for 190 tanks, later expanded in October 1941 to 230 and again in 1942 to 254; a subsequent incomplete order brought the grand total to 285 tanks when production ended in 1944. The Turan was used to equip the 1st and 2nd Armored Divisions and the 1st Cavalry Division in 1942–43. The Turan was fairly typical of European tanks of the late 1930s in terms of armor and firepower. Unfortunately, by the time it entered combat in Ukraine and Russia in 1941–42, it was already out of date following the arrival of the new generation of Soviet tanks such as the T-34.

The basic version of the tank was later designated as the 40M Turan I to distinguish it from other variants. The first major derivative was the 41M Turan II heavy tank. This was intended to offer the same mixture as the Wehrmacht's PzKpfw III and PzKpfw IV, with the Turan II serving as the fire-support tank comparable to the PzKpfw IV. The 75mm 41M tank gun was developed by MAVAG on the basis of the Austro–Hungarian Bohler 76.5mm 18M field gun, but with a modified caliber and a suitable tank mounting. Although development started in 1941, the first deliveries

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of the Turan II did not take place until May 1943. A total of 322 were ordered, but only 139 Turan II were completed through 1944.

While the Turan was under development, the Honved had planned a second round of army expansion better suited to the war on the Russian front. The Huba II plan envisioned the creation of two armored divisions based on the existing motorized brigades. Given the slow pace of Hungarian tank manufacture, the Honved realized it would have to acquire foreign tanks to implement this plan in 1942. Since funds were limited, the 1st Armored Division was to be raised using equipment purchased from Germany, while the 2nd Armored Division would be equipped with the new Turan tanks as they became available.

With its own priorities, Germany was unwilling to sell the latest tank types to Hungary, and so the Honved settled on buying 102 PzKpfw 38(t) Ausf. F and Ausf. G, known as the Skoda T-38 in Hungarian service, and these were delivered from November 1941 to March 1942. Hungary also purchased 22 PzKpfw IV Ausf. F1 with the short 75mm gun, which were classified as heavy tanks in Honved service. Finally, eight Pz.Bef.Wg. I command tanks were acquired. The 1st Armored Division was created in the spring of 1942 from the previous 1st Motorized Brigade. This division included 89 of the 102 PzKpfw 38(t) tanks and all 22 PzKpfw IV in the new 30th Tank Regiment. The division's 1st Armored Reconnaissance Battalion was equipped with Toldi light tanks and Csaba armored cars, while the 51st Armored Autocannon Battalion, sometimes called the 51st Tank-hunter Battalion, was equipped with 18 of the new 40M Nimrods.

The Turan III introduced a long 75mm gun and was the first version of the family to have adequate antitank firepower. However, it arrived too late to have any consequence on Hungarian tank deployment

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During 1944, a portion of the Turan and Zrinyi fleet was upgraded with side skirts to defend against the ubiquitous Soviet antitank rifle. These were patterned after the German *schurzen* except that they used pierced steel. This example is from the 3rd Tank Regiment, 2nd Armored Division, and was lost in Slovakia in early 1945. It is missing its gun assembly.

The Hungarian 1st Armored Division was assigned to the Hungarian 2nd Army, which also included nine infantry divisions. The Hungarians were deployed on the left flank of the German assault towards Stalingrad. The 1st Armored Division began to encounter the Red Army in a series of battles along the Don River beginning on July 18, 1942, at Uryv. Contact with Soviet tank units made it abundantly clear that the 37mm gun on the PzKpfw 38(t) was completely inadequate. Likewise, the neighboring infantry units were hopelessly unprepared to deal with the tank threat because of their reliance on the inadequate 40mm antitank gun. Urgent requests were relayed back to Budapest for better tanks and antitank guns. Additional tanks were acquired from Germany consisting of 10 PzKpfw III, 10 PzKpfw IV Ausf. F2, and five Marder II tank destroyers and these arrived by September 1942. Three more PzKpfw 38(t) were also transferred from German stocks later in the year. Nevertheless, losses in the previous months' fighting had been heavy and had included 48 PzKpfw 38(t) light tanks and 14 PzKpfw IV heavy tanks.

The 1st Armored Division was holding a sector of the Don Front above Stalingrad at the time of the Soviet offensive on January 12, 1943. It fought as part of the German Korps Cramer alongside two German infantry divisions. The division retreated from the Uryv bridgehead about 70km from its initial positions towards Noviy Oskol and Korotscha, but an

B

HUNGARIAN TOLDI I, 2ND RECONNAISSANCE BRIGADE, 1ST FAST CORPS, RUSSIA, 1941

In 1941, the Honved adopted "French camouflage," consisting of a base coat of army green (~FS 34096) with splotches of ochre (~FS 30266) and chocolate brown (~FS 30059). The national insignia was the Balkan cross, but with the cross itself painted in green and the corners of the symbol filled in with red to create the national colors of green/white/red. In this particular unit, the insignia tended to be painted as a circular roundel, while in other units it was a conventional cross with clipped corners forming an octagon. The Honved license plate was a thin white rectangle on the front and a square on the rear. The numbering pattern was "1H*xxx," with the star representing the Hungarian tricolor crest.

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The Zrinyi was the assault gun version of the Turan tank, armed with a 105mm howitzer. This example is seen during training at Varpalota in 1944.

attempt to create a defensive line failed and the division was forced into another fighting withdrawal to the Donets River near Belgorod, which it reached on February 8, 1943. The Don battles destroyed the Hungarian 2nd Army, and the 1st Armored Division was the only division to emerge partially intact. It lost virtually its entire inventory of tanks except for 3 Toldis and 3 Nimrods and the remnants were transported back to Hungary by the end of March 1943. Casualties in the first two months of 1943 were 2,362, including 254 killed, 971 wounded and 1,137 missing, about a quarter of the division's original strength.

In the wake of the Don River disaster, the Honved started its third wave of expansion, the Huba III plan, on April 1, 1943. It was obvious from the tank fighting in Russia that the new Turan tanks were already obsolete because of inadequate armor and firepower. Work was already under way on a turretless assault gun (*rohamtarack*), the Zrinyi, and so the emphasis in the tank-building program shifted to the planned construction of 240 Zrinyi.

Like the Turan, the Zrinyi II assault guns were retrofitted with side skirts in 1944. This particular example was captured by the Red Army in 1945 and is currently preserved at the NIIBT museum at Kubinka in Russia.

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The Honved captured numerous tanks from the Red Army, and put a handful back into service, including this lend-lease M3 light tank. This is from the later production batch, with the D58101 turret.

The Zrinyi was named after Nikolaus Graf Zrinyi, a hero from the war with the Turks who was killed in the battle of Szigetvar in 1566. The 44M Zrinyi I was intended to be armed with a long MAVAG 75mm 43M antitank gun, while the 43M Zrinyi II was armed with a MAVAG 105mm 40/43M howitzer. The new assault gun battalions would consist of a mixture of 21 Zrinyi I and 9 Zrinyi II. The first of these, the 1st Assault Gun Battalion, was formed in July 1943 using Turan and Toldi tanks until the first five Zrinyi II assault guns became available in August 1943.

Honved purchased 102 PzKpfw 38(t) Ausf. F and Ausf. G from Germany and these were delivered from November 1941 to March 1942. They were known as the Skoda T-38 in Hungarian service and served with the 1st Armored Division in Russia in 1942–43, where most were lost.

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Hungary purchased 22 PzKpfw IV Ausf. F1 with the short 75mm gun in 1941–42, and they were classified as heavy tanks in Honved service. They saw combat in Russia in 1942–43 with the 1st Armored Division.

There was recognition that the Zrinyi had tactical limitations owing to its fixed superstructure, so efforts began on redesigning the Turan turret to accommodate the long 75mm gun as the Turan III. There was also a scheme to rebuild some Toldi light tanks as tank destroyers armed with German 75mm PaK 40 antitank guns and to build an open-topped version as the Lehel armored ambulance. In the event, no series production of either type took place.

In the long term, the Manfred Weisz firm was assigned the development of the new Tas tank and tank destroyer, which were roughly patterned on the Panther and Jagdpanther. The Tas tank was armed with a Hungarian-manufactured copy of the same gun as the Panther, while the Tas tank destroyer was to be armed with the 88mm gun of the Tiger I tank. In the event, the prototype of the Tas tank was destroyed in a US bomber attack on July 27, 1944 and never reached production. It was fairly apparent that

C

1. HUNGARIAN STUG III AUSF. G, 2ND BATTERY, 7TH SUMEG ASSAULT GUN BATTALION, BATTLE FOR KIRALYHEGYES, SEPTEMBER 26, 1944

From the tactical number on the side, this was originally the StuG III of the battalion commander of the 7.Sumeg Rohamtuzer Osztaly, but on September 26, it was commanded by Lt Barnabas Koszeghy, who led the battery's 2nd Battalion. It was finished in the original German RAL 7028 *dunkelgelb* (dark yellow). The other StuG III of the battery were numbered in the usual fashion, 721, 722, etc, with the 7 indicating the battalion and the 2 indicating 2nd battery. During the battle for Kiralyhegyes, this battery was supporting the Hungarian 8th Reserve Infantry Division, which was defending the area against an attack by the Soviet 18th Tank Corps, reinforced by SU-85 tank destroyers of the 1438th Assault Gun Regiment. Koszeghy's StuG III was credited with the destruction of five of the 16 T-34 tanks claimed that day, but during the course of the fighting, his vehicle was hit and destroyed with the loss of the entire crew. He was posthumously decorated with the "Officer of the Hungarian Order of Merit" war decoration.

2. HUNGARIAN JAGDPANZER 38(T), 20TH EGRER ASSAULT GUN BATTALION, LAKE BALATON AREA, FEBRUARY 1945

The Hungarian Jagdpanzer 38(t) were left in their original German colors. This particular vehicle from one of the early production batches arrived in overall *dunkelgelb* RAL 7028 with a cloud pattern of RAL 6003 *olivgrün* edged in RAL 8017 *rotbrun*. This scheme was also seen widely on vehicles on the western front in the summer and autumn of 1944, and so was probably applied by a Wehrmacht depot before the vehicle was issued to the troops. The Hungarian tactical markings consist of a number on the superstructure side, usually in the format T-0xx for the 25.Kolozsvar Rohamtuzer Osztaly, K-0xx for the 20.Egrer Rohamtuzer Osztaly as seen here. This was painted over the German Balkan cross. Although some Hungarian Jagdpanzer 38(t) had the usual Hungarian national insignia of this period, the white cross on a black square, most of the equipment arriving from Germany between December 1944 and January 1945 was left with the German *Balkankreuz*. In the autumn of 1944, the Hungarian army issued instructions to leave the German insignia in place, but to edge the cross in red. This particular vehicle was named "Mokus" (red squirrel) in white on the glacis plate below the driver's visor.

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the Tas would not be ready, and so the Hungarian government attempted to negotiate license production of the Panther; this collapsed when Budapest was informed it would cost Pengo 200 million (RM 120 million).

Hungarian Armored Vehicle Technical Data				
	38M Toldi I	40M Nimrod	40M Turan I	43M Zrinyi II
Crew	3	6	5	4
Length (m)	4.75	5.32	5.55	5.9
Width (m)	2.14	2.3	2.4	2.89
Height (m)	1.87	2.8	2.39	1.9
Main gun	20mm MAVAG 36M	40mm MAVAG 36M	40mm MAVAG 41M	105mm MAVAG 40/43
Weight (m. tonnes)	8.7	10.9	18.2	21.5
Engine (hp)	155hp L8V/36 Tr	155hp L8V/36 Tr	260hp WM Z-Turan	260hp WM Z-Turan
Max. speed (km/h)	50	50	47	40
Armor (mm)	5–13	6–13	8–50	8–75

The war against Russia had never been popular in Hungary, and the Horthy regime began steps to extricate the country from the war with secret negotiations with Britain and the United States. Berlin learned of these efforts and on March 19, 1944, staged Operation *Margarethe*, putting Miklos Horthy under house arrest and installing a puppet government under prime minister Dome Sztojay. The Hungarian government was threatened with the introduction of Romanian and Slovak occupation troops if the Honved did not remain allied to the Wehrmacht, so Hungary reluctantly continued participating in the war. However, the March 1944 occupation largely put an end to Hungarian armored vehicle production.

The decimation of Honved units during the fighting on the Don in the summer of 1942 prompted Berlin to begin selling tanks to Hungary. This is one of the PzKpfw III Ausf. M delivered in September 1942.

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Under German pressure, the Honved deployed its 1st Army to eastern Galicia on the southeastern Polish–Ukrainian frontier in April 1944. This included the 2nd Armored Division and the new 1st Assault Gun Battalion. The first tank battle by the Turan went unexpectedly well when two Soviet T-34-85 tanks were knocked out. However, it was abundantly clear that the Turan was completely inadequate against the newer Soviet tanks and during the short April 1944 offensive, the division lost 8 Turan I, 9 Turan II, 4 Nimrods and 1 Toldi tank while claiming to have knocked out 27 Soviet tanks. The local German commanders were impressed with the bravery of the Hungarian tank units in these battles, and Generalfeldmarschall Walter Model, commander of Heeresgruppe Nord Ukraine (Army Group North Ukraine), ordered the transfer of a number of armored vehicles to reinforce the 2nd Armored Division. This included a few StuG III assault guns, 10 PzKpfw IV Ausf. H, and most surprisingly, 10 Tiger heavy tanks of the s.Pz.Abt. 503, which was in the process of conversion to the new Königstiger tank. These transfers were taken out of field stocks, and so do not usually show up in the official tallies of tanks transferred to Hungary later in the year. The Hungarian Tigers first went into action on July 26, 1944. By the middle of August 1944, the Hungarian 1st Army had been pushed back to the Hunyadi fortified line in the Carpathian Mountains on Hungary's eastern frontier.

Another acquisition in September 1942 was the PzKpfw IV F2, the first Hungarian tank with adequate antitank firepower. These served with the 1st Armored Division in the 1942–43 fighting.

The Hungarian 1st Cavalry Division was initially assigned on its own to antipartisan missions in eastern Poland but following the Soviet *Bagration* offensive in June 1944, which smashed Heeregruppe Mitte (Army Group Center), the division was sent forward in a vain attempt to stop the onrushing Soviet armored assault. In the fighting retreat from Kleck towards Brest-Litovsk, it lost nearly all of its armored vehicles including 84 Turan tanks. The Germans transferred a battery of Marder tank destroyers to the division and it served in the August fighting around Warsaw. In September 1944, it was withdrawn into Hungary where it was redesignated as the 1st Hussar Division (1.Huszarhadosztaly).

When Romania switched sides on August 23, 1944, the military situation facing Hungary became extremely grim. The Hungarian Army staged a series of counteroffensives towards Romania in order to deal with the Carpathian mountain passes. On September 5, the Hungarian 2nd Armored Division took part in the offensive against the Romanian army near Torda. The 1st Armored Division took part in the battles around Arad from September 13 to October 8. By mid-September, the Red Army had arrived, and the tide turned against the Hungarian forces. The intensity of the fighting is evident from the casualties. For example, the Hungarian 7th Assault Gun Battalion, equipped with Zrinyi and StuG III, was credited with destroying 67 Soviet tanks.

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To reinforce the 2nd Armored Division after its losses in Galicia in April 1944, Field Marshal Model agreed to transfer ten Tiger I tanks from s.Pz.Abt. 503, which was converting to the new Königstiger tank. At first these tanks remained in their original German markings, and this particular tank was commanded by Lt Ervin Tarczay of the 3/2.Tank Squadron.

Besides the Tiger tanks, Model also transferred 10 PzKpfw IV Ausf. H tanks to the Hungarian 2nd Armored Division. They came directly from local stocks, so the tanks arrived still in their original German markings, as seen here.

In an effort to reinforce the battered Hungarian army, Berlin finally agreed to transfer additional armored vehicles to Hungary. These were used to equip the so-called Szittya (Scythian) units, named after the legendary Steppe people. The armored vehicle transfers began in July 1944 and by the end of the year totaled 40 PzKpfw IV tanks, five Panther tanks, 50 StuG III assault guns, and 35 Panzerjäger 38(t) tank destroyers. The majority of the new StuG III assault guns went to the 6th Assault Gun Battalion of the Billnitzer Battle Group (Billnitzer Csoport). Most of the Jagdpanzer 38(t) went to the 20th and 25th assault gun battalions in December 1944–January 1945 at the time of the fighting around Budapest and Lake Balaton. The Panther tanks belonged to Lt Ervin Tarczay's 3/2.Platoon in the 2nd Armored Division and were first committed during the battle for Arad in the autumn of 1944. The other vehicles were used in small numbers in other formations.

Horthy continued attempts to extricate Hungary from the war, and on October 15 announced that he had signed an armistice agreement with the Soviet Union. He ordered the 2nd Armored Division to Budapest to support his actions, but it was halted by German troops without fighting. The Wehrmacht initiated Operation *Panzerfaust*, which included the abduction of Horthy's son; Horthy renounced the armistice and Hungary remained in the war. The battles on the approaches to Budapest began in late October, with the 1st Armored Division and 1st Hussar Division fighting on the Danube line south of the city and the 2nd Armored Division and Billnizter Group fighting south of the city. Much of the armored force was encircled and destroyed in the four months of fighting around Budapest, which finally fell to the Red Army on February 13, 1945. The 1st Hussar Division was outside of the encirclement in the Vertes Hills west of the city and finally surrendered in late March 1945. Some elements of the 2nd Armored Division fought to the northwest of the city along the Danube, and a few Turan I tanks and Zrinyi II assault guns withdrew towards Bratislava in neighboring Slovakia, where they were destroyed by their crews. One of the last major Hungarian armored actions of the war involved the Jagdpanzer 38(t) of the 20th and 25th assault gun battalions, which took part in the Wehrmacht's desperate Operation *Frühlingserwachen* counteroffensive in the Lake Balaton region in early March 1945.

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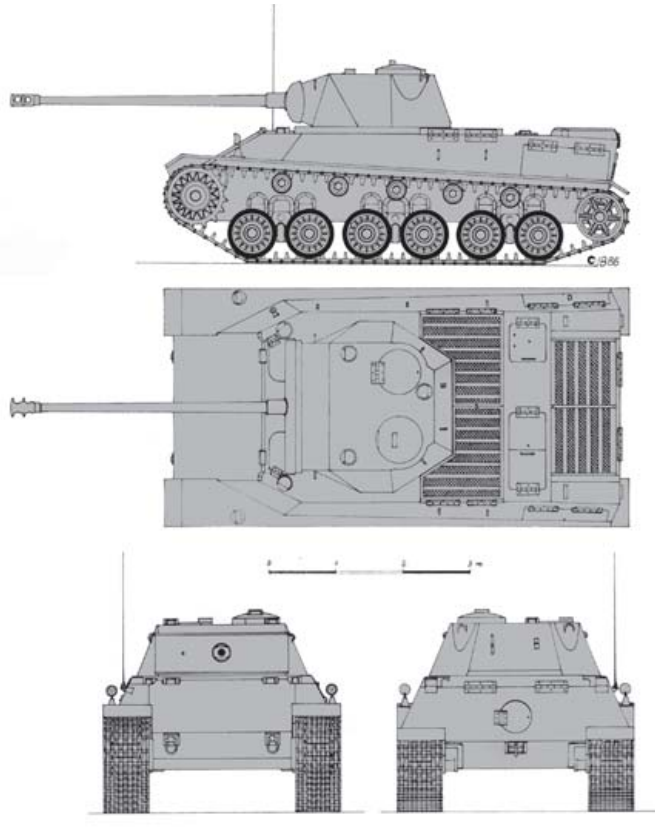
ROMANIA

Romania fielded more troops than any of Germany's other eastern allies, but its army was especially poorly equipped. During the 1930s, Romania was part of France's "Little Entente" in central Europe, and so its equipment tended to come from France or allied countries such as Czechoslovakia.

Romania purchased 74 Renault FT light tanks in the 1920s and these were used to form the 1st Tank Regiment (Regiment 1 Care de Lupta). By the mid-1930s, these tanks were obsolete and Romanian military attachés began examining suitable tanks in Britain, Czechoslovakia and France. After protracted negotiations with CKD and Skoda in Czechoslovakia, the Romanian Ministry of Defense in 1936 decided to purchase 36 AH-IV-R tankettes and 126 Skoda S-II-aR light tanks, which were designated respectively as the *fane de recunasfere* R-1 and the *fane usor* R-2 in Romanian service. The R-1 reconnaissance tank was intended for cavalry use while the R-2 was intended for tank battalions. During the course of delivery and testing of the Skoda R-2, the Romanian army insisted on many small changes and so the last half of the order, designated the R-2c (*cimentate*) had a different turret configuration from the initial 63 tanks, with the redesigned rear turret plate formed from two separate flat armor plates in a shallow "V" shape rather than the single curved plate of the original.



Tas scale plan (Ivan Bajtos)

The Romanian cavalry units were equipped with the Czechoslovak AH-IV, known in Romanian service as the R-1. This was a reconnaissance tank, armed with two hull-mounted machineguns and a single machinegun in the turret.

The Romanians had also examined various French armored vehicles and in May 1938 ordered 50 Renault R-35 infantry tanks and 60 Renault UE light artillery tractors. A joint company called Franco-Romana was also organized at this time to license manufacture a later batch of R-35 tanks, and Malaxa undertook license manufacture of the UE tractor. The Romanian R-35 production never materialized.

In May 1938, another Romanian commission visited Czechoslovakia to discuss license production of the R-1 and R-2 in Romania and to purchase a medium tank, tentatively designated R-3. The commission was shown several experimental Czechoslovak medium designs including the V-8-H, TNH and S-II-c (T-21) but in the event, the order was delayed by the German annexation of Bohemia-Moravia in 1939

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The backbone of the Romanian tank force was the R-2, the Romanian designation for the Czechoslovak Skoda S-II-aR, better known by its German designation of PzKpfw 35(t). This is a tank of the 1st Tank Regiment on the Don Front in the winter of 1942, before the disastrous Soviet offensive.

and the consequent decision by the Wehrmacht to take over Czech armament production. Instead, Romania planned to manufacture 300 R-1 tankettes and 280 R-2 tanks under license at the Malaxa Works, but this project collapsed with the bankruptcy of that factory.

The Munich Crisis and the outbreak of World War II in September 1939 severed Romania's supply of tanks. A minor windfall occurred at the end of September 1939, when much of the Polish Army's 21st Armored Battalion escaped into Romania, which boosted the Romanian inventory to 73 Renault R-35 tanks. About 10–15 other Polish armored vehicles were also driven over the border, mostly worn-out TK and TKS tankettes. In 1940, the 1st Tank Regiment was reequipped with the new R-2s, and the 30 old Renault FTs were used to form a GHQ tank battalion for internal security duties. In 1940, the tank regiment was used to form the core of a new Moto-Mechanized Brigade (Brigazii Moto-Mechanizate). The deliveries of the French R-35s permitted the organization of the new 2nd Tank Regiment.

Under the secret terms of the Molotov–Ribbentrop Pact, Germany acknowledged the Soviet intention to occupy eastern portions of Romania, Bukovina and Bessarabia. In the wake of these territorial threats, Ion Antonescu took control of the government and steered Romania into Germany's orbit, signing a treaty with Berlin in November 1940. The Wehrmacht consented to further discussions between the Romanian army and the Czech tank plants, and in January 1941 the Romanian army tried to order 216 T-21 tanks for the R-3 medium tank requirement, as well as 395 LT vz 38 light tanks, by then known by its German designation as the PzKpfw 38(t). With the start of the Russian campaign approaching, the OKH (Oberkommando des Heeres: Army high command) refused to allow the Czechoslovak firms to accept the Romanian order.

Romania agreed to participate in Operation *Barbarossa* alongside Germany. By this time, the two tank regiments had been consolidated into a new Armored Division (Divizei Blindate). In reality, the new division did not fight as a unified formation in the summer 1941 campaign. The 1st Tank Regiment was divided up, with one battalion of R-2s supporting the 3rd Romanian Army and the other went to the 4th Romanian Army. The R-2 tanks saw considerable fighting during the summer campaign, which concluded with the bloody siege of the port of Odessa on the Black Sea. Romanian tank losses were substantial, though more often from mechanical exhaustion than combat. By the end of August 1941, barely 20 R-2 tanks of the original 105 were operational, and 46 disabled tanks were sent back to Romania.

Following the decimation of Romanian tank units on the Don in January 1943, Berlin initiated the Birnbaum Program, sending 50 obsolete PzKpfw 38(t) light tanks to an independent tank battalion, which used them in the fighting in the Kuban region in 1943.

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By the end of 1941, the 1st Tank Regiment had suffered 26 combat losses of its R-2 tanks and 60 more were broken down. In early 1942, 40 R-2s were sent back to Skoda in Plzen (Pilsen) for overhaul, and a further 50 tanks were sent back to the Skoda automobile repair shop (LIMP) in Ploiesti in Romania for less extensive repairs, essentially denuding the regiment of tanks. To make up for Romanian losses, in October 1941 Berlin finally consented to sell the Romanians 26 old PzKpfw 35(t) from 11.Panzer Division. They were overhauled by Skoda and delivered in June and July 1942. After a short-lived return to the Russian front in the summer of 1942, the Romanian tank units were forced to return to Romania as a result of extensive mechanical breakdowns. The Renault R-35 tanks proved far less valuable in the 1941 campaign because of their slow speed and mechanical frailty after long road marches. Nevertheless, their thick armor was appreciated when the tanks were used for infantry support.

The Romanians realized that their R-2 tanks were on their last legs and were hopelessly obsolete against the Soviet T-34, but Berlin continued to block efforts to obtain tanks from the Czech plants. In May 1942, the Germans refused a Romanian request to begin production of the PzKpfw 38(t) and Skoda T-23 tank by the Resita arsenal in Bucharest because it would have required Czech armor plate. In September 1942 Berlin finally agreed to sell Romania a paltry 22 PzKpfw III tanks. These were intended to reinforce the 1st Tank Regiment on a scale of one heavy tank company in each of the two battalions as part of the plan to rebuild the Romanian army for operations in the Caucasus.

When the Romanian 1st Armored Division returned to the Russian Front in the autumn of 1942, it had 111 tanks, which included 121 R-2s, 19 PzKpfw III and PzKpfw IV; 37 of the R-2 tanks were mechanically exhausted and were left behind in depots behind the Chir River before even reaching the combat zone. The division was attached to the 48.Panzer Korps alongside the 22.Panzer Division and parts of the 14.Panzer Division, numbering about 255 tanks of which half were Romanian. The opposing Soviet Southwest Front had 410 T-34s and KVs as well as numerous T-60 light tanks and older types. Most of this force was concentrated in the Soviet 5th Tank Army, with the 1st and 26th Tank Corps on a 35km front opposite the Romanian 3rd Army.

On November 19, 1942, the Southwest Front launched Operation *Uranus,* with an aim towards encircling the German 6.Armee in Stalingrad. The initial attack by four Soviet infantry divisions was followed late in the day by two tank corps, which penetrated 15km. On the night of November 19/20, the Romanian 1st Armored Division moved forward from Perelasovskiy towards Serafimovitch, becoming intermixed with the Soviet 26th Tank Corps in the dark. The Soviet tank units overran the rear supply elements of the Romanian division, isolating the division's tanks from any fuel supply. On the morning of November 20, the 1st Romanian Armored Division fought with the 19th Tank Brigade of the Soviet 26th Tank

The TACAM T-60 was a Romanian tank destroyer built on captured Soviet T-60 light tank chassis and armed with the Soviet F-22 76mm field gun. This example is seen in operation in Romania in the spring of 1944.

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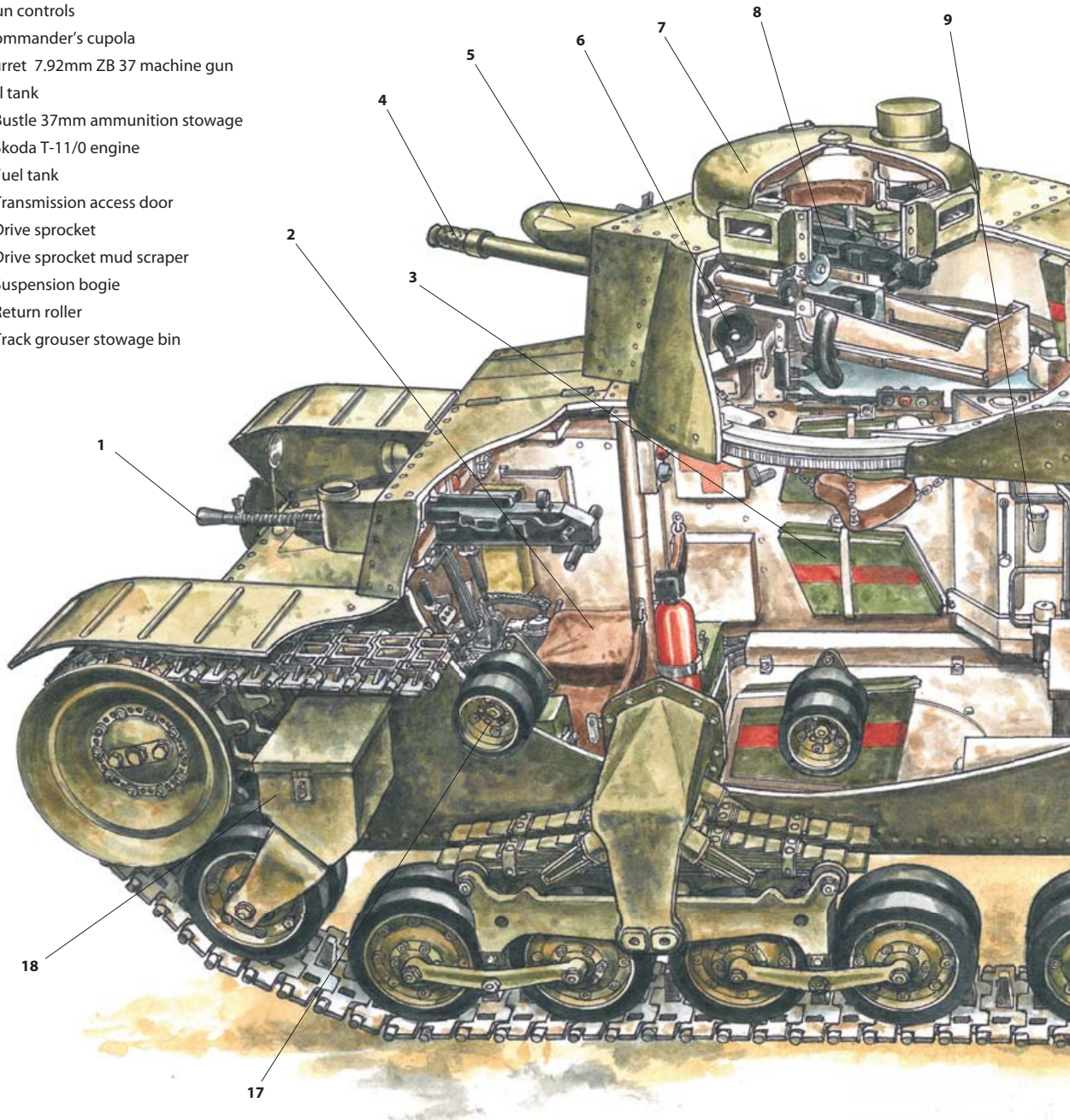
D ROMANIAN R-2C LIGHT TANK, 1ST ARMORED DIVISION, DON FRONT, 1942

Key

1. Hull 7.92mm ZB 37 machine gun
2. Driver's seat
3. 37mm ammunition stowage box
4. Skoda A3 37.2mm gun
5. Gun recoil cylinder
6. Gun controls
7. Commander's cupola
8. Turret 7.92mm ZB 37 machine gun
9. Oil tank
10. Bustle 37mm ammunition stowage
11. Skoda T-11/0 engine
12. Fuel tank
13. Transmission access door
14. Drive sprocket
15. Drive sprocket mud scraper
16. Suspension bogie
17. Return roller
18. Track grouser stowage bin



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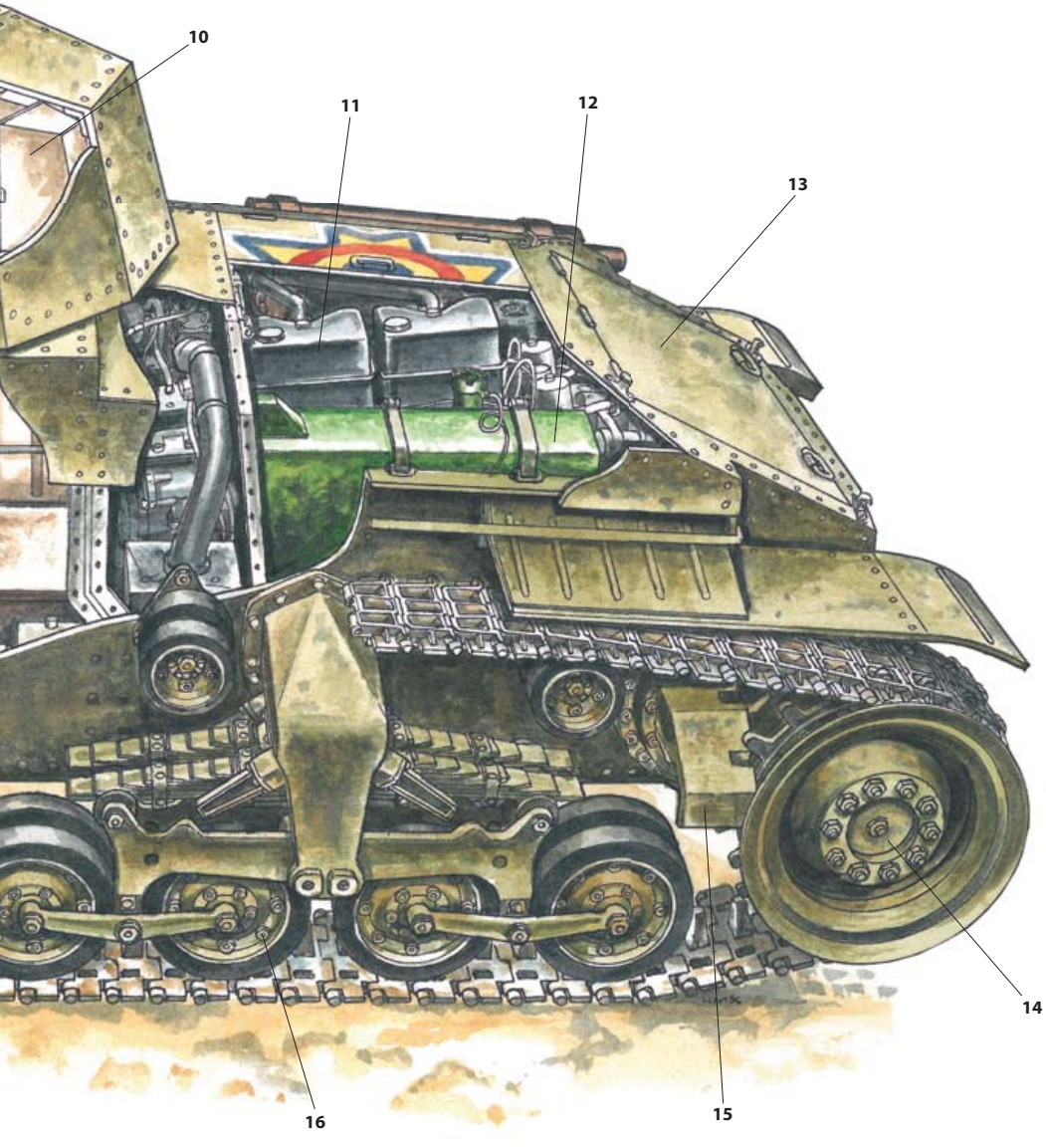
Technical Data	
Manufacturer	Skoda-Plzen
Crew	4
Length	4.9 m
Width	2.06m
Height	2.37m
Weight	9.7 tonnes (empty); 10.5 tonnes (combat loaded)
Ground pressure	0.51kg/square cm
Fuel	124 liters + 29-liter auxiliary tank
Max road speed	34km/h
Range	120km (cross-country); 190 km (road)
Engine	120hp (88 kW), 4-cylinder, 8.52 liter gasoline engine
Armor	25mm (hull, turret front); 16mm (hull, turret side and rear)
Main armament	Skoda A3 37.2mm L/40 gun, 675 m/s initial muzzle velocity
Elevation	–10+25 degrees
Ammunition	76 x 37mm rounds
Secondary armament	2 x 7.92mm ZB35 or ZB 37 machine guns
Secondary ammunition	2,700 rounds



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The TACAM R-2 combined the obsolete R-2 light tank chassis with a captured Soviet 76mm ZIS-3 obr. 42 divisional gun to create an expedient tank destroyer. These were built in 1944 but did not see combat until after Romania switched sides.

Corps, while the German 22. Panzer Division engaged the 1st Tank Corps. The Germans were forced to retreat and the Romanians were cut off. During the fighting that day, the Romanians lost 25 tanks but claimed 62 Soviet tanks destroyed. Over the course of the next few days, the division fought in desperate conditions. An attempt to link up with the 22.Panzer Division on November 22 cost 10 more tanks but claimed 65 more Soviet tanks. By the following day, the division was down to only 19 R-2 and 11 PzKpfw III and IV tanks. The Romanian tanks tried to escape over the Chir River, but many tanks were abandoned when they ran out of fuel, leaving only five R-2s and one PzKpfw III. By the time it withdrew out of the combat zone over the Donets River on January 1, 1943, the division had lost 81 R-2 tanks, 27 in combat and 54 from breakdown or lack of fuel. All of its German supplied tanks were lost, and the division was left only with 40 broken down R-2 tanks previously left behind in depots. To prevent its total collapse, the Wehrmacht transferred six SdKfz 222 and five SdKfz 223 armored cars to the division for self-defense.

The collapse of the ill-equipped Romanian army formations was a central cause in the collapse of the Stalingrad Front, and forced the Germans to reconsider their miserly arms policy. As the first stage in rebuilding the Romanian Army, the Germans began the Birnbaum Program, under which 50 worn-out PzKpfw 38(t) light tanks were shipped in March 1943 directly to Romanian units in the Kuban bridgehead. They formed an independent tank battalion (Batalionul Carelor de Lupta T-38), but less than half the tanks were functional and it took time to repair the remainder. This unit saw extensive fighting in the Kuban region, on the Azov Sea near Kerch and on the Perekop Peninsula leading into the Crimea. It was withdrawn to Sevastopol in April 1944 and sent back to Romania with only a small fraction of its original tanks.

Even before the Stalingrad debacle, it was obvious that the R-2 was useless in tank-versus-tank combat. So an effort began to rebuild these tanks as turretless tank destroyers patterned on the German Marder series using captured Soviet 76.2mm divisional guns. Since there were so few surviving R-2 tanks, Romanian officers suggested using some of the numerous Soviet T-60 light tanks that had been captured. These were attractive for conversion since they were powered by a Soviet copy of an American Dodge engine, and so spare parts were available from Romanian and German inventories. Lt Col Constantin Ghuilai headed the design effort, and selected the Soviet F-22 76.2mm divisional gun, because of both its excellent antitank performance as well as the immediate availability of several dozen captured guns and ammunition. Romanian industry was so impoverished by this stage of the war that armor plate had to be stripped from captured Soviet tanks. By June 1943, 17 of these *Tun autopropulsat cu afet mobil* T-60 (TACAM T-60) conversions had been completed, and they were used to help in the rebuilding of the 1st Armored Division, with a company issued to both of the division's tank regiments.

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Once this project was under way, Ghuilai turned his attention to a similar conversion on the obsolete R-2 tank. Although it was planned to arm this tank destroyer with the F-22 gun, these older guns were in short supply, so instead the conversions used the newer Soviet ZiS-3 76.2mm gun. The army was reluctant to return the R-2 tanks to the factories until the Wehrmacht delivered the last of the planned batch of PzKpfw 38(t) replacements, so the conversions didn't start until February 1944 at the UMP and Leonida plants in Bucharest. The original August 1943 plan was to convert all 40 R-2 tanks into the TACAM R-2, but only 20 were completed by late July 1944 when the program was halted. The Romanian Army decided it wanted a better gun: either the new Resita 75mm antitank gun, a Romanian copy of the ZIS-3 but chambered for German PaK 40 ammunition, or the German 88mm gun. The 20 TACAM R-2 were deployed with the 63rd TACAM Company. There were similar schemes to turn the R-1 tankette into the TACAM R-1 with captured Soviet 45mm antitank guns, and the PzKpfw 38(t) with Soviet 76.2mm guns, but neither program reached the production stage.

Some thought was given to rebuilding the Renault R-35 as a turretless tank destroyer, but instead a program began to rearm it with the more powerful Soviet 45mm tank gun. The workshops of the 2nd Tank Regiment converted one tank by swapping a turret from a captured Soviet T-26 tank. In January 1943, Col Ghuilai recommended instead that an extension be added to the front of the Renault turret to accommodate the gun so that the more thickly armored French turret could be retained. After tests, the army ordered the conversion of Renaults as the *Vanatorul de Care R-35 Transformat*, and 30 were completed by June 1944.

The most ambitious Romanian tank effort of the war was the *Vanatorul de Care Maresal* assault gun program. A test bed was built in the summer of 1943 by mounting a Soviet 122mm obr. 04/30 howitzer on a T-60 light tank chassis within a completely enclosed casemate. This was successful enough that two more prototypes were completed by October 1943. Although the Romanians developed a shaped-charge projectile for the 122mm howitzer for antitank use, the successful test of the new Resita 75mm antitank gun led to a shift to this weapon. The Romanians approached the Germans about the supply of a thousand Hotchkiss tank engines from plants in France as well as other components. The Germans were impressed with the overall layout of the Maresal, and it is credited with being the inspiration for the German Jagdpanzer 38(t) tank destroyer. The fourth prototype of the Maresal, the M-04 with the 75mm gun, was completed in February 1944.

There were plans to create 32 antitank battalions, each with 30 Maresal. When the Hotchkiss plant in France was overrun by the Allies in the summer of 1944, the Germans agreed to provide the 160hp Praga engine. The last prototypes, M-05 and M-06, moved towards the incorporation of more elements from the PzKpfw 38(t) since these could still be acquired from Czech plants. The Wehrmacht was pleased enough with the design that plans were under way to build a Flakpanzer version for German service, armed with the 37mm Flak gun. In the event, US

In an attempt to redeem the weakly armed Renault R-35, the Romanians rearmed it with captured Soviet 45mm guns fitted in an extended section of the turret. These were designated as *Vanatorul de Care R-35 Transformat* and 30 were completed by June 1944. By the time they were deployed for combat, Romania had switched sides, so they were painted with the post-armistice insignia as seen here.

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The Romanian army purchased 76 StuG III Ausf. G tanks from Germany in 1944. The example was found by the US Army's 704th Tank Destroyer Battalion, 4th Armored Division, on a German train bringing armored equipment back from the front in western Czechoslovakia. Romanian tanks were repainted with this marking after switching sides in the summer of 1944. This particular Romanian assault gun had been captured by the Wehrmacht during 1944–45.

bomber attacks against Romanian plants and the eventual Romanian defection ended the program before production beyond the six prototypes took place.

Berlin finally authorized a rearmament effort, the Olivenbaum Program, in the autumn of 1943. This program was intended to rebuild the renamed 1st Great Romania Armored Division and to create a 2nd Armored Division with the 2nd Tank Regiment as its seed. Between November 1943 and July 1944, Germany sold Romania a total of 114 PzKpfw IV tanks, 98 StuG III assault guns, and two BefPzWg IV command tanks. The June 1944 table of organization for the armored divisions was based around a single tank regiment, a mechanized infantry regiment, and a motorized artillery regiment. This division was somewhat weaker in troops and equipment than a comparable German Panzer division. The tank regiment's two tank battalions each consisted of light tank HQ platoon with TACAMs, two companies of PzKpfw IV and one StuG III company for a total of 90 tanks and assault guns in the regiment.

The Red Army reached Romanian soil in April–May 1944 during the first Iasi-Chisau (Russian: Jassy-Kishniev) offensive. The Romanian 1st Armored Division was heavily involved in the second battle for Iasi-Chisau in mid-August 1944, though in separate battle groups and not as a unified formation. In the meantime, Romanian political leaders were attempting to extricate the country from the war. On August 23, 1944, the king staged a coup d'état against the Antonescu regime and switched alliances to the Soviet side. A large number of German units located in Romania were forced to surrender and the Romanian army became allied to the Red Army. Some Romanian armored vehicles from the army training center were deployed as the Niculescu Armored Detachment and were involved in some skirmishes with German troops in Bucharest during the coup; the 1st Armored (Training) Division saw some fighting in the Otopeni and Beniasa areas. In September 1944, the 1st and 4th Romanian Armies were put under Soviet command. The 2nd Tank Regiment with about 66 PzKpfw IV and R-35/45 tanks and 80 other armored vehicles fought in Czechoslovakia, ending the war near Vienna. Towards the end of the war, the Soviets supplied small numbers of T-34-85 tanks to the Romanian Army, but it remained primarily equipped with armored vehicles of German origin.

This illustration shows the Maresal tank destroyer that was under development in the summer of 1944. The final prototypes were built using components from the Czech PzKpfw 38(t) tank. Production began in August 1944, but the cessation of parts from the Czech and German plants put an end to the program before any series production was completed.

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BULGARIA

Bulgaria was allied to Germany during 1941–44, but refused to declare war on the Soviet Union. It allowed German troops transit to Greece and participated in the occupation of that country, including Macedonia. Eventually, it sent troops to Yugoslavia for antipartisan actions to keep the Belgrade–Greece roads open.

The Bulgarian armored force initially consisted of 14 Italian CV 33 tankettes acquired in 1934 and eight Vickers 6-ton tanks purchased from Britain in 1938. These were used to form two tank companies in the two fast divisions. In February 1940, the Germans sold the Bulgarian Army 36 PzKpfw 35(t) light tanks. In June 1941, the Bulgarians consolidated their modest tank force into the 1st Armored Brigade, which consisted of the 1st Tank Regiment and the 1st Mechanized Infantry Regiment. The tank regiment nominally consisted of a reconnaissance company with the 14 CV 33 tankettes, and two tank battalions, one with the PzKpfw 35(t) and the Vickers, and the other equipped with 40 war-booty French R-35s donated by the Germans. This unit saw no significant fighting in 1943. The Germans finally consented to modernize it, and beginning in July 1943 supplied Bulgaria with 46 PzKpfw IVs, 10 PzKpfw III tanks and 25 StuG III assault guns, and necessary howitzers, antitank guns and other equipment. The newly rejuvenated tank regiment was supposed to consist of three battalions, each with two companies of 15 PzKpfw IVs and a company of PzKpfw 35(t) or 38 (t) for a total of 140 tanks, but its strength never reached this level. This was just as well for the Wehrmacht, as on September 9, 1944, Bulgaria switched sides and turned on its former ally. The 1st Armored Brigade served alongside Soviet units and took part in the fighting in Hungary in 1945.

Bulgaria received a modest supply of tanks through German channels during the war, but never participated in combat against the Soviet Union. After switching sides in the summer of 1944, the Bulgarian tank force took part in the campaigns in the Balkans alongside the Red Army. This is a view of the 1st Armored Brigade during the victory parade in Sofia in December 1944 in front of St Aleksander Nevskiy cathedral. In the foreground is a PzKpfw 35(t) and several PzKpfw 38(t) to the left, while in the background are the unit's PzKpfw IV tanks.

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TOP LEFT
Finland captured four T-34 tanks during the 1941–42 fighting and put them back into service after repair. This is R-111 of the Heavy Armored Company in Aanislianna in the spring of 1942. It is from one of the earliest 1941 batches of T-34 tanks fitted with the F-34 76mm gun. (Esa Muikku)

TOP RIGHT
The predominant tank in Finnish service during the 1941–44 campaign was the T-26. This shows a group of tanks of the Armored Brigade, including the rebuilt Vickers with 45mm guns towards the center, and a number of T-26 obr. 1939. The tactical markings indicate the 1st Company of the Tank Brigade. (Esa Muikku)

FINLAND

During the 1939–40 "Winter War" with the Soviet Union, the Finnish Army fielded a single tank battalion formed in December 1939 with two companies of obsolete FT-17s and two companies of Vickers 6-ton tanks. Only the 4th Tank Company saw much fighting, losing seven of its 13 Vickers, plus one damaged.

Although this small force did not play a major role in the 1940 war, large numbers of Soviet tanks were destroyed or captured, and these were used to form the basis for new armored units raised in 1940–41. The Armored Battalion (PsvP: Panssaripataljoona) was considerably strengthened and modernized, having three tank companies, a heavy tank platoon and three armored car platoons. The Vickers 6-ton tanks were modernized by rearming them with captured Soviet 45mm tank guns, and they were sometimes called T-26E. As of May 31, 1941, the Finnish Army had 29 T-37 amphibious tanks, 13 T-38 amphibious tank, 26 Vickers light tanks, 10 T-26 Model 1931, 20 T-26 Model 1933, four T-26 Model 1937, two T-28 medium tanks, two OT-26 flamethrower tanks, four OT-130 flamethrower tanks, and a small number of older, obsolete types. Finland also acquired six Landsverk Anti 40mm

E

1. ROMANIAN R-1 RECONNAISSANCE TANK, ROMANIAN 1ST CAVALRY DIVISION, SOUTHERN RUSSIA, 1942

Romanian tanks were usually in the color of the manufacturer, so in the case of the R-1s and R-2s the color was Czech khaki (olive drab). The Romanian Army's R-1 cavalry tanks had the crest of St George painted on the side of the turret in white, while the R-2 tanks usually had the crest of King Carol II. During the war years, the cross of King Michael I was used, usually in the form of a small white stenciled cross on the hull side and a larger cross in the national colors on the engine deck for air identification. During the fighting in southern Russia in 1942, some of the R-1 tanks had the aircraft style of national roundel painted on the side and on the upper bow plate for recognition. Prior to the war, the vehicle registration number was painted on the hull side in black in the form of "Sr. XX" but during the war, a new army vehicle registration plate was introduced, painted on the bow and stern in black numbers on a white rectangle.

2. ITALIAN L6/40, LXVII BATTAGLIONE BERSAGLIERI, DON FRONT, DECEMBER 1942

The two companies of L6/40 serving on the Don Front arrived in the usual Italian *kaki Sahariano* (Sahara khaki, ~FS 20260) color. This was the battalion commander's vehicle and so had the two company colors of red and blue combined in a rectangle. The battalion number is painted in Roman numerals on the turret. The vehicle license plates follow the usual Italian army practice, with rectangular painted numbers on the bow, and a conventional metal license plate on the rear left plate. During the winter fighting, the battalion's tanks received a rough coat of lime whitewash as seen here.

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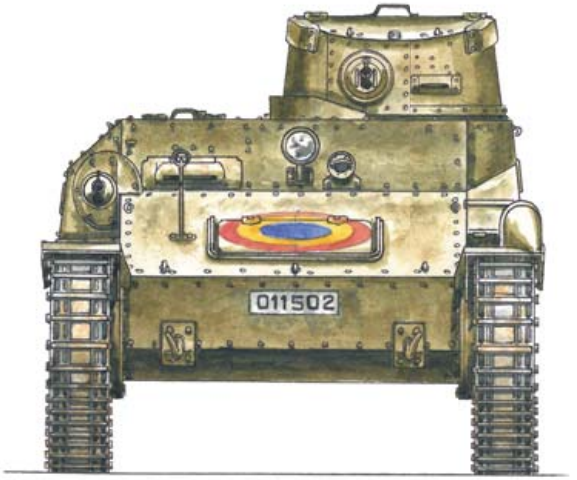

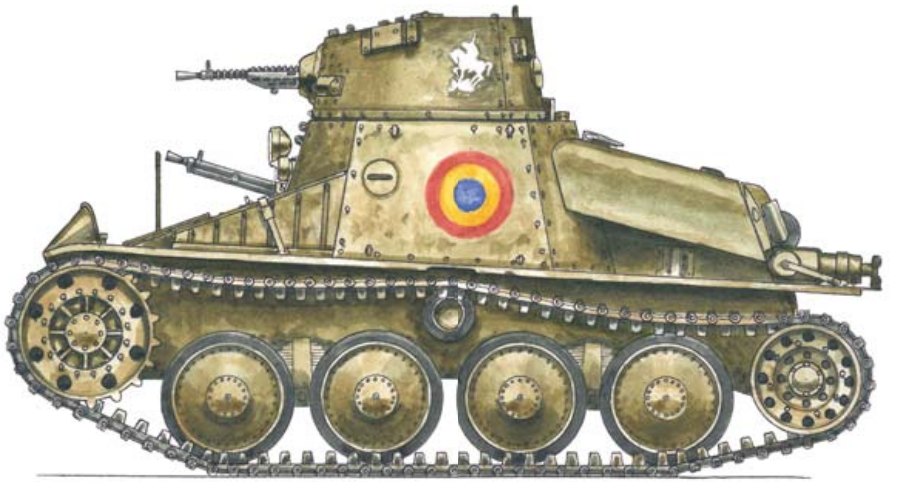

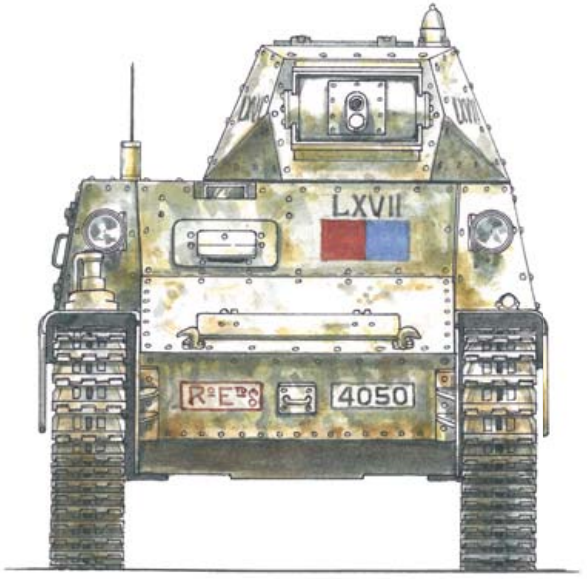

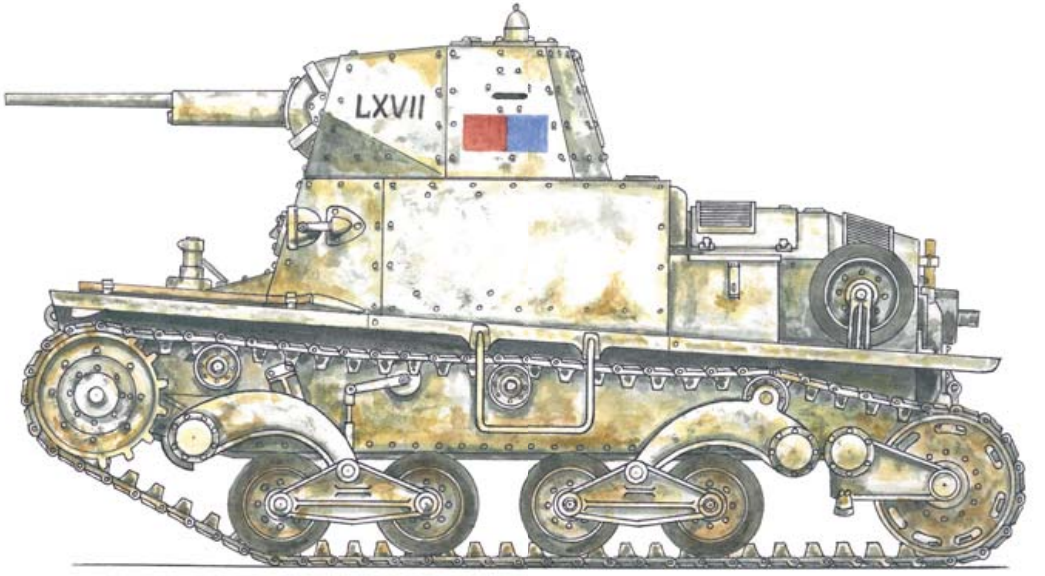

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The Finnish army captured nine T-34-85 tanks during the summer 1944 fighting and took them into their own service. This is Ps 245-5 (tactical number 201) of the 2nd Armored Brigade, which was captured near Petrovka and is seen here during the fighting in Pihkalanjarvi (Druzhnoselye) in August 1944. (Esa Muikku)

A single KV-1 obr. 1942 heavy tank was evacuated from the Svir power plant area in the spring of 1942 and received the registration number R-100 in Finnish service. It has wheels and other parts from several tanks to keep it operating, and is seen here at the depot in Jyvaskyla in August 1945 with the new national insignia. (Esa Muikku)

self-propelled guns from Sweden, but unlike the Hungarians, used them in their intended role as an antiaircraft vehicle.

Finland allied itself with Germany to retrieve the territories lost in the 1939–40 war, and took part in the Operation *Barbarossa* invasion on June 22, 1941, in Karelia. Finland had very limited war aims during the "Continuation War," and after Germany failed to win a decisive victory in the summer and autumn of 1941, Finland began to restrict its participation in the German attempts to seize Leningrad and the Soviet Arctic ports. On February 10, 1942, the tank force was reorganized into an expanded Armored Brigade (Ps.Pr.: Panssariprikaati) consisting of the 1st Armored Battalion with the 1st, 2nd and 3rd Armored Companies, and the 2nd Armored Battalion with the 4th and 5th Armored Companies and an understrength Heavy Armored Company. Each company except the last had three platoons with five tanks each, plus a company command tank. Finland took advantage of war booty captured in the 1941–42 fighting, including a few captured Soviet T-34 tanks, to modernize its arsenal. In June 1942 the army reorganized its tank forces again by forming an armored division consisting of the Armored Brigade, the 1st Infantry Brigade, and support units. Nevertheless, this division was still based around war-booty tanks that were increasingly obsolete. Of the roughly 150 tanks in service in July 1943, more than 120 were Vickers or T-26 light tanks.

Finland had an active program to rebuild and modernize its tank equipment. By 1942, the old Soviet BT-7 cavalry tank was not very useful as a tank when confronting the Red Army's newer types such as the T-34 or KV, owing to its inadequate 45mm gun. As a result, the Finnish Army decided to convert some into assault guns using British QF 4.5 inch Mark II howitzers.

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The BT-42 was a Finnish conversion of the captured Soviet BT-7 tank with an enlarged turret fitted with a British QF 4.5 inch Mark II howitzer. This is a new conversion at Aanislianna in the spring of 1943 and is carrying the early style of national insignia with the long arms. (Esa Muikku)

These used the turrets from the later BT-7 Model 1937 with the conical turret, but with a large extension at the rear to accommodate the howitzer and to raise the roof level. A prototype was sent for trials in September 1942 and, after corrections, a total of 18 were constructed, with deliveries from February 1943 until late autumn 1943. These were originally used by the Finnish Army's Assault Gun Battalion (Ryn.Tyk.P.: Rynnakkotykkipataljoona) and first saw combat against Soviet bunkers along the Svir River line in late 1943. The BT-42 was a mixed blessing. While better than the BT-7 for tank fighting, it was not an especially viable combat vehicle as the two-piece howitzer ammunition was slow and difficult to load in the cramped turret. A high-explosive antitank (HEAT) round was manufactured in Finland based on German ammunition, but it did not prove capable of defeating typical Soviet tanks such as the T-34. In an attempt to improve antitank firepower,

The Stu 40 (StuG III Ausf. G) tanks were assigned to the Assault Gun Battalion, replacing the BT-42. On arrival from Germany, they had several small changes made, including the addition a rear stowage bin that led to the relocation of the spare wheels to the superstructure side. They were repainted in Finnish three-color camouflage and national markings; this example is Ps 531-6 "Liisa". (Esa Muikku)

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The Finnish Stug III Ausf. G tanks were subjected to extensive modification in 1944 to improve their protection. Many had logs and concrete armor added. Here, Ps 531-14 is loaded on a railcar for transport from Lappeenrannasta to Oulu on September 20, 1944. (Esa Muikku)

30 StuG Ills were purchased from Germany to reequip the Assault Gun Battalion. After the StuG III assault guns arrived in September 1943, the BT-42s were shuffled off to a Detached Armor Company (Er.Ps.K.: Erillinen Panssarikomppania) in December 1943.

The Red Army finally lifted the siege of Leningrad in January 1944, and Finland began to negotiate with the Soviet government for peace. Finland rejected the Soviet terms on April 12, 1944, but Finnish diplomacy prompted Berlin to halt further armored vehicle deliveries, which included 15 additional StuG III and nine war-booty T-34 tanks that were in transit at the time. In June 1944, the Soviets launched a major counteroffensive against Finland to force it out of the war. The renewed fighting made it clear that the only effective armored vehicles in Finnish service were the StuG III and the handful of T-34 tanks. Of the 87 T-26 tanks in service at the beginning of the offensive, 25 were lost in the summer fighting. The BT-42 assault guns saw extensive combat use and the Detached Armor

FINNISH STUG III AUSF. G, 1ST COMPANY, ASSAULT GUN BATTALION (2./RYN. TYK.P.), JUNE 1944

In June 1941, the Finnish army adopted the hakaristi as the new tank national insignia. This marking bears no relation to the Nazi swastika, having been used on Finnish aircraft since 1918. The orders showed a short-arm version of this insignia, but initially the troops painted on a black insignia with white shading that had full-length arms like the aircraft insignia. Only later did the official, short-armed version become prevalent. During the winter months of the Continuation War, Finnish tanks were finished in white. In the spring of 1943, the summer scheme of dark green overall was superseded by a three-color camouflage scheme of moss green (~FS 34083), grey (~FS36306), and sand brown (~FS 30040). In spite of its official name, the sand brown was in fact a dark brown. The Finnish StuG III Ausf. G vehicles had a number of local modifications, including a large stowage box on the rear engine deck, and the transfer of the two spare road wheel sets to either side of the casemate. This particular StuG III named "Liisa" (Ps 531-6) was credited with 5 tank kills. It was finished in the standard Finnish army scheme of moss green, grey and brown.

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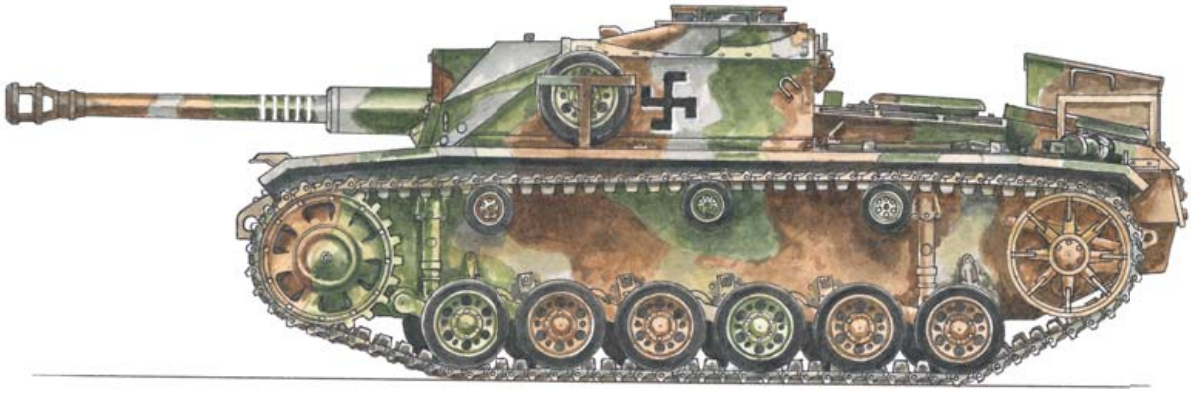

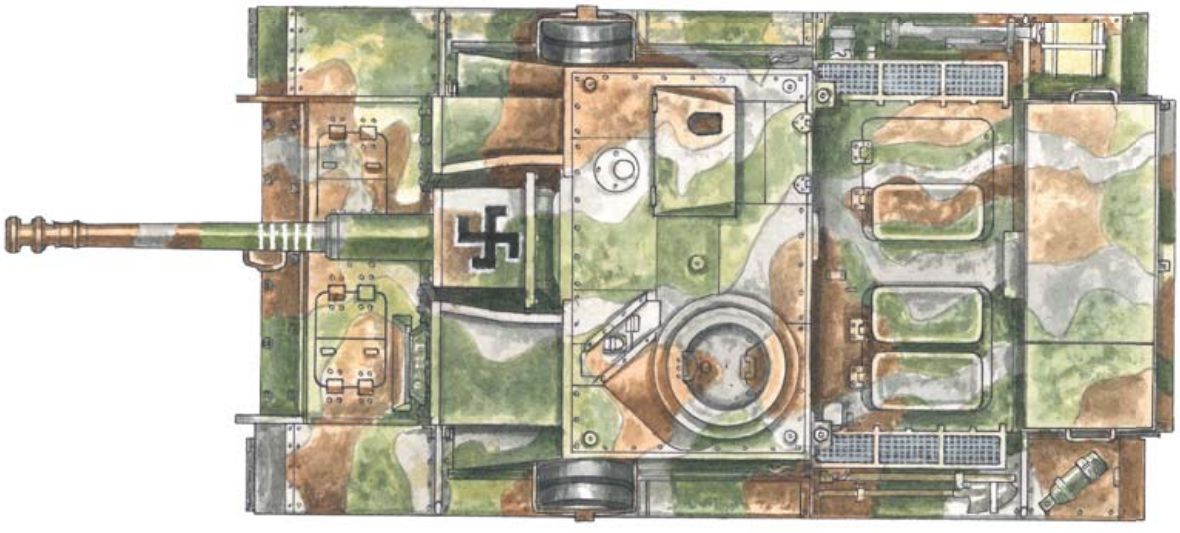

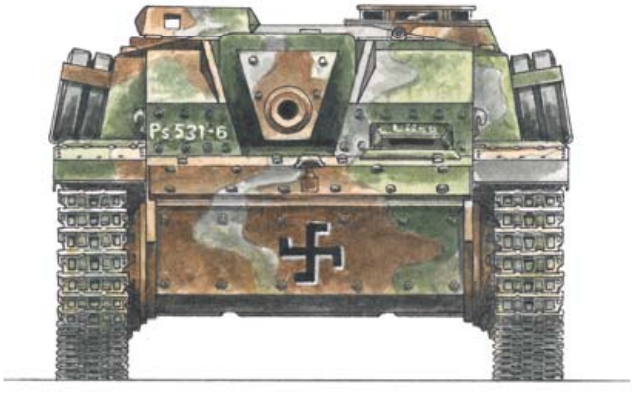

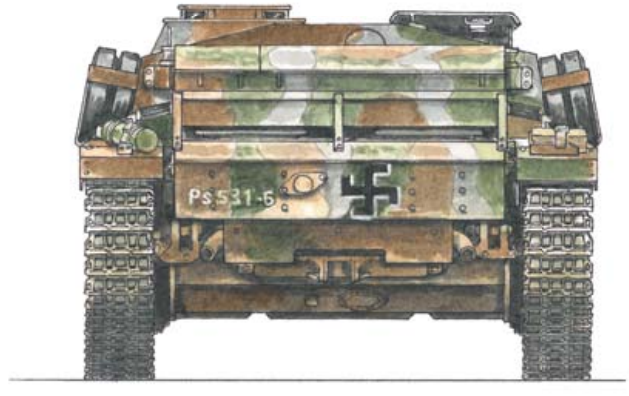

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PzKpfw IV Ausf. J (Ps 221-15) of the 2nd Armored Brigade in October 1944. The PzKpfw IV tanks were amongst the last shipments from Germany and they remained in their original German dark yellow finish during the war years. (Esa Muikku)

Company was deployed in the defense of Viipuri (Vyborg). Its howitzer armament was adequate for infantry close support but nearly useless in tank fighting against the better Soviet types. One BT-42 managed to fire 18 rounds against a Soviet T-34 without managing to penetrate it. The Finns lost eight of their 18 BT-42s during the summer 1944 fighting.

The StuG III Assault Gun Battalion saw very extensive combat in the summer battles and lost eight vehicles in the June–July fighting. In view of the combat and diplomatic deadlock, Berlin lifted its arms embargo. As part of the so-called "Ryti–Ribbentrop arms package", Germany delivered three war-booty T-34, 29 additional StuG III Ausf. G and 15 PzKpfw IV Ausf. J through August 1944. Equally importantly, Germany delivered large quantities of Panzerfaust antitank rockets. The Finnish Armored Division quickly incorporated a few Soviet tanks captured during the June–July fighting, including seven T-34-85 tanks. The Finns planned to rearm the T-34-85 with the same 75mm gun as that on the StuG III, but the war ended before this program proceeded. The heavy losses and limited combat value of the obsolete light tanks led to the decision on July 7, 1944, to retire the T-26, T-28, and BT-42 tanks immediately. By mid-August, the Soviet attack had become irresistible, and Finland again started armistice negotiations. Under the terms of the agreement, Finland was obliged to expel German troops. The Finns finally signed an armistice on September 4, 1944. The Germans troops in Finland began a withdrawal northward to Norway, with the Finnish army in half-hearted pursuit. Some Finnish tanks participated in this "Lappland War", including some of the old T-26s and a few T-34-85s.

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ITALY

This is a staged shot of a Soviet soldier with a PTRD antitank rifle standing in front of an Italian L6/40 of the LXVII Battaglione Bersaglieri captured during the fighting on the Don during the *Little Saturn* operation in December 1942. It was brought back to Moscow for display at the captured weapons exhibition in Gorky Park as seen here, and today resides in the NIIBT museum in Kubinka.

Italian armored units took part in the campaign in Yugoslavia and Greece, and deployed substantial occupation forces in these countries until the September 1943 armistice. They took an active role in antipartisan fighting, especially in Yugoslavia.

Italy deployed a large contingent to the Russian front, the Italian 8a Armata (8th Army), also known as the ARMIR (Armata Italiana in Russia). Because of its heavy commitments in North Africa, the armored component of the ARMIR was tiny. During the invasion of the Soviet Union, the only significant armored force was part of the CSIR Fast Corps (Corpo di Spedizione Italiano in Russia), which included 61 L3 tankettes as part of the III Gruppo Corazzato "San Giorgio" (3rd San Giorgio Armored Group) of the 3a Divisione Celere "Principe Amedeo Duca d'Aosta". These tankettes were soon worn out on account of long road marches, and since their combat value was so limited they were withdrawn to Italy in the spring of 1942. More modern equipment was sent in the spring of 1942 during a reinforcement of the 3a Divisione Celere of the ARMIR. The LXVII Battaglione Bersaglieri included two companies of L6/40 light tanks, numbering about 60 tanks at peak strength. The XIII Gruppo Cavalleggeri di Alessandria had two squadrons of 19 Semovente 47/32 assault guns. These two formations were caught up in the offensive by the Soviet Southwestern Front's *Little Saturn* operation, which started on December 16, 1942, on the upper Don River on the flanks of the Stalingrad battles. The Bersaglieri L6/40 tank battalion was smashed in the fighting around the villages of Arbuzovka and Boguchar. Surviving elements of these formations were destroyed in the succeeding Soviet Ostrogozhsko-Rossoshanskaya offensive that started on January 13, 1943.

The Italian army had planned a substantial reinforcement of the ARMIR with tank formations in 1943, but the twin defeats at Stalingrad and Tunisia led to decisions in February 1943 to abandon any further reinforcement of the Russian front in favor of defense of Italy itself.

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Germany provided Croatia with five PzKpfw IV Ausf. H tanks in late 1944, which were deployed with the tank company of the Poglavnik Guard Division's mobile group.

CROATIA

Following the conquest of Yugoslavia in April 1941, Germany permitted the formation of an independent Croatia. Over the course of the next three years, a variety of army and militia armored units were formed using hand-me-down equipment from the German, Italian and Hungarian occupation forces to reinforce Croat units taking part in antipartisan operations. Details of many of these transfers remain obscure, since they were often undertaken by local units. The fascist Ustachi political movement was supported by Italy, and its paramilitary formations, the Ustaska Vojnica, were allowed to expand by the occupation authorities. The new Croat government formed its own defense units as the Hrvatsko Domobranstvo, creating a parallel military force. In July 1941, the Croatian government began to form a tank company within the new 1st Motorized Battalion (1.automobilskog batalijuna domobranstva). The government attempted to take over the tanks of the former Yugoslav army, but most were seized by German occupation forces except for a few Renault FTs and R-35s. The Italians and Hungarians finally agreed to provide military assistance, transferring small numbers of L3 tankettes to the Ustachi. The Ustachi tankettes served in the tank companies of the new Poglavnik Defense Brigade (PTS: Poglavnikkova Tjelesna Sdruga).

G

1. FINNISH T-34 TANK, 3RD CO., 1ST BATTALION, ARMORED BRIGADE (3./I/PS.PR.), JUNE 1944

This particular T-34 is an early production Stalingrad Tractor Plant tank with the typical flat rear turret plate and the early pattern rectangular door on the rear transmission plate. The vehicle registration number, Ps 231-2, was carried on the lower center of the bow and the upper center of the upper rear plate. The tank's tactical number was painted in yellow on the turret side.

2. FINNISH BT-42 ASSAULT GUN, DETACHED ARMORED COMPANY (ER.PS.K.), JUNE 1944

The BT-42 assault guns were used in the battle for Viipuri in late June 1944. The vehicle registration numbers in the Ps.511-1x series were painted on the center of the bow and the center of the rear plate. The assault guns were camouflage painted in the usual moss green, grey and brown scheme.

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In 1942, the government purchased four PzKpfw I tanks from Germany and also obtained 16 war-booty Polish TK and TKS tankettes. These assorted armored vehicles were most often used for convoy escort and guard duty, but they began to be deployed on antipartisan operations as early as December 1941. Additional supplies of tankettes were provided to the Ustachi, and by 1943 the three PTS tank companies were consolidated into the PTS Motorized Group (Brzog Sklopa PTS).

In the autumn of 1942, there were plans to reinforce the Croat motorized battalions (samovozne bojne) with 20 old Czechoslovak army LT vz 34 light tanks, but these were in such poor repair that the effort collapsed. The Wehrmacht encouraged the Croat Army to expand its antipartisan forces and there was a scheme to establish new rifle and mountain brigades, each of which would have an organic tank platoon with two PzKpfw II and three PzKpfw III tanks. The Domobranstvo created an armored headquarters in July 1943 to manage the new force, but the promised Panzers never arrived. By the spring of 1944, about five platoons had been raised for the mountain brigades using four Semovente 47/32 assault guns and 15 war-booty French Hotchkiss H-39 and Somua S-35 tanks.

Italy's withdrawal from the war in September 1943 created an enormous vacuum in the Balkans, since Italy had deployed numerous divisions in the former Yugoslavia and Greece on occupation duties. As a result, the Wehrmacht began to make more serious attempts to expand allied formations in the region to take over the antipartisan struggle against Tito's communist partisan movement. There was a small windfall of armored equipment left behind by Italian forces in the area, including 26 L6/40 light tanks. In October 1943, the reinforced Ustachi armored forces were consolidated under the Ustasha Fast Brigade (Brzi Ustaski Zdrug) based in Travnik, which had a nominal strength of two tank battalions and two motorized battalions.

The Wehrmacht supported the creation of three Croatian Legion infantry divisions, and these had an organic tank destroyer company, nominally equipped with Semovente 47/32 assault guns. The Poglavnik force was rebuilt as a division (PTD: Poglavnikova Tjelesna Divizija) with German help, and eventually included an armored regiment with two tank companies and a fast regiment with one tank company. This unit was initially equipped with the usual assortment of leftover equipment such as Italian L6/40 light tanks. It was deployed during the Operation *Rouen* antipartisan operation in the Kalnik Mountains northeast of Zagreb in July 1944. In the autumn of 1944, Germany provided Croat forces with a further 20 PzKpfw III Ausf. N, 10 PzKpfw IV Ausf. F1 and five PzKpfw IV Ausf. H, which were earmarked for the PTD. These took part in the fighting against the Red Army and Bulgarian Army in Croatia in 1945.

RUSSIA

Curiously enough, a number of Russian formations allied to the Wehrmacht had small tank forces. Shortly after the fall of Yugoslavia, the Russian émigré community in the area began to discuss the establishment of a military formation led by officers of the former Tsarist army. This emerged in September 1941 as the Independent Russian Corps (Otdelniy Russkiy Korpus), renamed again in October as the Russian Guard Corps (Russkiy Okhranniy Korpus). The unit

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The ROA 1st Division received a company of ten Jagdpanzer 38(t) in the final months of the war, and they took part in its operation to support the Czech uprising in Prague in May 1945, as seen here.

recruited other émigré Russians from scattered communities in the Balkans and grew to roughly a division in size. Its ambiguous status was finally clarified at the end of 1942 when it was incorporated into the Wehrmacht as the Russisches Schutzkorps Serbien (RSS). This formation was used for antipartisan operations, but had no connection with the later RONA (Russkaya Osvoboditelnaya Narodnaya Armiya: Russian Peoples' Liberation Army) or ROA (Russkaya Osvoboditelnaya Armiya: Russian Liberation Army). The Wehrmacht provided the unit with a handful of French Hotchkiss H-39 tanks.

German army officers hoped to exploit the widespread disaffection towards the Soviet regime among Russian prisoners-of-war (PoWs) by forming a pro-German Russian army to fight against Stalin's Red Army. But Adolf Hitler was strongly opposed to any such notion, saying that he found the notion of "sub-human" Russians in German uniforms to be repulsive. Nevertheless, there was a desperate shortage of manpower on the Russian Front, and there were large numbers of Russian prisoners-of-war willing to volunteer for service as an alternative to the deadly PoW camps. This led to a number of attempts to form Russian units, often without Hitler's knowledge or consent. The history of the German efforts to create Russian combat units is far too complicated to recount here, and this account is limited to major formations that employed tanks.

The Waffen-SS raised its own force for anti-partisan duties as the RONA. This was initially deployed as an SS-Sturm Brigade for antipartisan operations in the Lokot region of Belarus under the command of Boleslav Kaminski. During its peak in 1943–44, the Kaminski Brigade operated a small tank force made up of captured Soviet tanks including a KV-1 heavy tank, eight T-34 medium tanks,

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five BT cavalry tanks, and some armored cars. This unit was most notorious for its atrocities in the suppression of the 1944 Warsaw uprising. There were various schemes to enlarge it into the 29. and 30. Waffen Grenadier Divisionen der SS (russiche Nr. 1 und Nr. 2), but these schemes collapsed in late 1944.

The German army (Heer) formed its own Russian formations as the ROA. This stemmed from a November 1944 program to create several infantry divisions around the KONR (Committee for the Liberation of the Russian People), headed by Gen A. A. Vlasov. Vlasov had been a rising star in the prewar Red Army, and one of its most skilled commanders. Vlasov commanded the 2nd Shock Army on the Volkhov Front in the spring and summer of 1942, and was captured when the Wehrmacht overwhelmed his encircled force. His own disillusionment with the Stalin regime led him to agree to help the Germans form anti-Soviet Russian military formations. By November 1944, there were 800,000 "eastern volunteers" serving in various capacities with the Germans. The aim of Vlasov's KONR was to turn them into a coherent anti-Soviet fighting force. The 1st ROA Division was formed at Munsingen on November 12, 1944 under the command of Maj Gen Sergei Bunyachenko. The Germans referred to it as the 600.Infanterie Division (russ.). It was formed from the embryonic 30. Waffen Grenadier Divisionen der SS (russiche Nr. 2) and the remnants of the Kaminski Brigade, plus other prisoners-of-war. The division's first armored detachment was equipped with captured Soviet vehicles including a few T-34 Model 1941 and some BA-10 armored cars, probably from the former RONA equipment. In order to convince the Germans of the unit's value, in early February 1945 a "light armored detachment" from the division was sent into combat against the Soviet bridgehead at Neulowin, and then into Pomerania. It is not clear what type of armored vehicles were used in this operation. The Germans were suitably impressed with the results, and plans were under way to form additional units.

In early February 1945, the division was allotted ten Jagdpanzer 38(t). These vehicles were deployed with the division's Reconnaissance Battalion 1600, commanded by Major Kostyenko. Besides the Jagdpanzer 38(t), the unit had nine T-34 Model 1941 tanks, two SU-85 tank destroyers and some BA-10 armored cars, probably the RONA leftovers. The division was first deployed to the Oder Front in March 1945. In mid-April, the division was assigned the task of assaulting a Soviet bridgehead at Frankfurt-on-Oder after German troops had failed to do so. Attacking over exposed ground with little artillery support, it was a bloody failure. By this stage of the war, it was obvious that Germany was on the brink of defeat. Caught between two of the century's most reprehensible totalitarian regimes, the soldiers of the ROA were damned no matter which course they chose. Vlasov and the senior KONR leadership were bitter over years of humiliating treatment from senior German leaders and decided to switch sides. The division headed to Czechoslovakia of its own accord, ignoring German orders. It hoped that the unit could surrender to American forces, which were advancing into western Czechoslovakia at the time. On May 2, 1945, a Czechoslovak delegation from Prague met with Vlasov and the other senior officers and asked them for armed assistance in the planned insurrection in the city against the Germans. They were pledged asylum in Czechoslovakia for their troubles. Vlasov agreed, and on the morning of May 6, 1945, the division joined in clearing Prague of German forces in concert with Czech resistance units. Following the arrival of the Red Army, the Czechoslovak officials proved unable and unwilling to honor the pledge of asylum and most of the ROA troops were executed by the Red Army as traitors or sent to Gulag-run concentration camps.

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FURTHER READING

Following the war, most of the army records of Romania and Hungary were seized by the Red Army. Their status today remains something of a mystery, and the military history archives of these countries have scant documentary resources. During the Cold War, historical research into the wartime alliances with Germany were discouraged in the Warsaw Pact countries. As a result, there was very little published on Hungarian, Romanian, Bulgarian or Slovakian tanks for many decades. In recent years, there has been a considerable increase in the number of publications on this subject, though the shortage of historical records has left some significant gaps. There are some obvious exceptions, such as Finland. Besides the books listed below, there has also been an outpouring of specialized articles in recent years.

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OSPREY
PUBLISHING

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First published in Great Britain in 2013 by Osprey Publishing,
Midland House, West Way, Botley, Oxford, OX2 0PH, UK
43-01 21st Street, Suite 220B, Long Island City, NY 11101, USA
E-mail: info@ospreypublishing.com

Osprey Publishing is part of the Osprey Group

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A CIP catalog record for this book is available from the British Library

Print ISBN: 978 1 78096 020 3
PDF e-book ISBN: 978 1 78096 022 7
EPUB e-book ISBN: 978 1 78096 021 0

Index by Mark Swift
Typeset in Sabon and Myriad Pro
Originated by PDQ Media, Bungay, UK
Printed in China through Worldprint Ltd.

13 14 15 16 17 10 9 8 7 6 5 4 3 2 1

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This book is dedicated to the memory of two of the pioneer researchers on the history of armored vehicles in Central Europe: Ivan Bajtos and Janusz Magnuski.

ACKNOWLEDGEMENTS

This book would not have been possible without the extensive help of many researchers over the years, especially Janusz Magnuski, Ivan Bajtos, Just Probst, Esa Muikku, Leland Ness, Henry L. de Zeng IV and George Balin.

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